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ABSTRACT

The financial, political, and faculty-administration attitudinal constraints in the state suggest that certain voucher demonstration projects would serve several purposes: (1) produce beneficial results for a segment of postsecondary students and institutions; (2) be structured to be acceptable to the educational community; and (3) provide the empirical data so desperately needed before the desirability, impact and costs of larger projects could be defined. Two pilot projects are proposed, as is the application of a voucher system to New Jersey's postsecondary system. Extensive background information, a bibliography, and statistical tables are included. (MSE)

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COMMISSION ON FINANCING POSTSECONDARY EDUCATION
STATE OF NEW JERSEY

A PUBLIC COMMISSION APPOINTED BY THE NEW JERSEY BOARD OF HIGHER EDUCATION

POSTSECONDARY EDUCATION VOUCHERS:
THE CASE FOR A DEMONSTRATION

A Study Conducted by the
State of New Jersey
Commission on Financing Postsecondary Education
and
supported by a grant from the
Carnegie Corporation of New York

April, 1977

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"I don't want to use the term 'voucher' because it's loaded; we'll call it a 'chit'."

- George Weathersby,
  in conference in Princeton,
  New Jersey, May, 1976.

Foreword

Few people today would challenge the premise that this nation has and will continue to benefit from public support of education beyond the high school. Indeed there is an even greater push by most institutions and by the majority of students and faculty to increase Federal, state and local support for postsecondary education. While debates over the best way to provide this support continue to arise, there is unanimity in the belief that the expenditure of public dollars for postsecondary education, collected by various taxing means, is a key to national prosperity and survival.

The financing methods of disbursing those public dollars at the state level vary considerably. One method which has never been tested is that of using vouchers disseminated by the state directly to students. This Commission has recommended an alteration in New Jersey's financing system which would provide for more direct student aid. While far from a voucher system, the word, with all of its connotations inevitably surfaces in discussions relating to this Commission.

Those connotations are severe to say the least. Merely mention the word "voucher" to a group of educators and you are perceived as a misguided representative of all that is evil. Faculty, administrators and non-professional employees react to the word as if it were an ogre incarnate threatening their very existence. Charges that a voucher approach portends the demise of public education abound, although few people ask why private or independent institutions would prosper and public institutions wither. Administrators in public institutions claim a movement to a voucher system will cause instability that will negate planning--claims made in spite of the existence of hundreds of independent institutions that have relied on student choice as a tool for survival. Opponents claim "educational hucksterism" is a guaranteed outcome of a voucher system, thereby raising significant doubts about the intellectual integrity and standards of thousands of faculty members. Many state unequivocally that "students are unable to make decent choices" forgetting that these same students select programs and majors once enrolled, and are entitled to choose who they want to lead the country or represent a congressional district. And these same critics also neglect to mention that the average age of students is increasing, with the result that many adult students know exactly what they want from college.

The following pages chronicle the voucher efforts at the elementary and the secondary level that have failed, almost inevitably because of the political opposition of vested interest groups. Consequently, no one really knows what impact vouchers would have on education at the elementary-secondary or postsecondary levels. As is pointed out below, much has been written and numerous hypotheses developed but the opposition of institutions and faculty has prevented a testing of these hypotheses to date. There is ample evidence that the current system of postsecondary education finance is flawed in at least the following ways:

- it is inequitable in that the poor pay disproportionately for the education of the wealthy;
- it discourages institutional diversity by funding public institutions to fit a "suitable" mold rather than encouraging institutions to meet student needs;
- it discriminates against non-public institutions because public subsidies are used to subsidize institutions thereby artifically reducing prices (tuitions);
- it causes irrational behavior; students make choices based on partial information with respect to the costs of public postsecondary education;
- groups are arbitrarily excluded from receiving support of any kind from the state because of age, years since graduation from high school and part-time status.

These flaws constitute a serious bill of indictment, and yet interest groups, who might be harmed by a change, have been able to minimize serious consideration of alternative financing systems, much less the development of demonstration or pilot programs.

However, a number of environmental changes seem to be occuring that will encourage cautious experimentation. First, few will argue that the age group that has traditionally been the key postsecondary education population will decline in the 1980's and early 1990's. While many claims are made about the potential enrollment of non-traditional, continuing and older degree-seeking students, these students have yet to materialize in substantial numbers. This causes concerned faculty and administrators to question the policy of putting all of student aid in one basket labeled "for traditional, full-time students only." Second, a number of academic leaders recognize that there is potentially more political power in a large number of students faced with reductions in student aid than in a few institutions challenging a reduction in subsidy--if the students are educated to understand the issues and how to use their political power constructively. Third, a few economists believe that in a time of restricted resources, increased student aid, based on need, is a more effective way of providing educational opportunity to those least likely to attend than is providing heavily subsidized education for all, including those with the ability to pay either a significant proportion or all of the costs. Finally, there are people who study the research and believe that, at any level of funding, the use of student aid is more likely to increase enrollments among those who have been traditionally underrepresented in postsecondary education.

These factors are reasons for cautious optimism,although the number of significant first steps that have been taken are few. Educational and political leaders in Oregon, New York, Maine, North Carolina, Massachusetts and New Jersey have recently or are currently examining or discussing the implications of a voucher financing system. While this is still a small minority it is evidence that the issue is not yet dead.

The environmental constraints in the state, in terms of finances, faculty-administration attitudes, and politics, have led the staff of the New Jersey Commission on Financing Postsecondary Education to conclude that the voucher demonstration projects proposed in the following pages would produce beneficial results for a segment of students and institutions, could be structured so that they would be acceptable to the educational community and would provide the types of empirical data so desperately needed before the desirability, impact and costs of more significant projects can be defined.

Although a new chancellor of higher education has just been appointed and it is a gubernatorial election year, I would hope that these first small, tentative steps would be taken so that New Jersey can both more effectively serve that part of the population seeking postsecondary education and also assume a leadership role in thinking through the type of adjustments to the financing system that are going to be necessary, given the altered environment of the next twenty years.

Andrew H. Lupton
Executive Director

INTRODUCTION

The voucher concept has been lauded as "one of the most provocative notions raised in American schooling in recent times."[1] It has been debated, applauded, opposed and reconstructed for over fifteen years. In spite of this extensive commentary, vouchers have not been shown to have any demonstrable ability to solve the problems they were designed to eliminate, nor has it been proven that vouchers will not solve those problems. In fact, there has been a dearth of voucher demonstrations on any educational level, despite a six year effort by the U.S. Office of Economic Opportunity and the National Institute of Education to promote their study and analysis.

The few demonstration voucher projects now in operation, with the exception of the recent elementary level Alum Rock project in California, are at the postsecondary, albeit non-traditional, level. This development may be indicative of the willingness of parents to allow local school authorities to decide what is best for their children. Or it may simply reflect the more amenable circumstances surrounding the utilization of vouchers in a non-compulsory system, and the greater freedom of choice which is associated with higher education.

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[1] R. Reinhold. "School Vouchers: Quick Defeats Raise Question on Test Validity." New York Times, (June 4, 1975) 18:4.

The conclusion of the following discussion and analysis of education vouchers is that vouchers have not been given a true test, either by public officials or by the general public, because their purpose is largely misinterpreted and their potential outcomes pose serious threats to established institutions and employee groups. The purpose of vouchers is simply to aid the people in obtaining a preferred education at equitable costs and through equal opportunity. The expected outcomes of vouchers are numerous, often contradictory and unmeasured. In this report, an attempt is made to familiarize the reader with the history and purpose of the voucher movement, the obstacles which have hampered it and the few victories it has achieved. The arguments are presented so that the final chapter, in which a voucher demonstration is proposed for the New Jersey postsecondary system, is best appreciated only after discussion and analysis of the history and purposes of vouchers.

An introduction to the voucher concept is given in Chapter I of this report; the discussion includes an analysis of the economics and goals of vouchers at the elementary and postsecondary levels,[2] and the major arguments advanced in opposition to the concept. Feasibility studies sponsored in the early 1970's by the U.S. Office of Economic Opportunity (OEO) and the National Institute of Education (NIE) are discussed in Chapter II, in light of the political influences which prevented implementation of all but one of these voucher plans.

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[2] The only known consideration of vouchers at the high school (secondary) level was presented by the Center for the Study of Public Policy in 1973-74. The Center proposed a movement away from the comprehensive high school in one building to a "Flexible Tuition Program," in which students could study in non-school programs to learn certain skills and subjects. Two educational components, a counseling agency and a resources network, would provide information on options in the program. For more details, see Butler (1973) and Overlan (1974).

The economics of postsecondary student aid vouchers are analyzed in Chapter III. Those variables which affect enrollment in postsecondary education are discussed, and a case is presented for the viability of postsecondary vouchers, based on designated goals of the market system. Postsecondary programs currently in operation are examined in Chapter IV.

The application of a voucher system to New Jersey's postsecondary system is proposed in Chapter V. The current financing system, and recommendations for change in that system made by the New Jersey Commission on Financing Postsecondary Education are discussed in that chapter. Finally, two alternative pilot demonstration projects are proposed for New Jersey's postsecondary system.

I

THE VOUCHER CONCEPT

An education voucher is a mechanism for providing greater choice among educational options and encouraging competition among educational institutions. Vouchers may be utilized to alter existing misallocations of financial and educational resources among lower, middle and upper income groups. Under a pure voucher system, a parent or student is given a voucher valued at the per student cost of education, and institutions finance their operations by charging tuitions equal to that per student cost.

The voucher concept is roughly based on the free market concept introduced by the economist Adam Smith in the eighteenth century. Smith defined a free market as having three primary components. The first is that the supply and price of goods or services are determined by competition among private suppliers of those goods and services. The second is that the individual consumer of goods and services pay the full cost per unit. The third is that the government does not play a role in the transaction of goods and services between supplier and consumer, either as producer of goods and services, or as subsidizer of suppliers or consumers.[3]

In applying the free market concept to education, Smith allowed a divergence from these components. He believed that, since education benefits both society and the individual, the costs of education should be defrayed by "the general contribution of the whole society" and/or by the individuals who receive the immediate benefits of education. He warned, however, that the suppliers of education must not be unequally subsidized, because those with little or no subsidy would not be in a viable competitive position against those which are highly subsidized. Smith suggested that the quality of the good or service suffers if suppliers are not subject to competition.

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[3] See A. Smith. The Wealth of Nations. (Chapter IV.)

Milton Friedman (1962) based his proposal for an educational "voucher" system on the free market concept introduced by Adam Smith. He proposed that a voucher system, in which individuals rather than institutions are granted government subsidies for educational costs, is a preferable alternative to the current practice of state subsidy and administration of public educational systems. Friedman is particularly opposed to the use of tax monies collected from all citizens to subsidize the education of a subpopulation of citizens' children, regulated by the state government with little or no direct or meaningful citizen or parental influence on expenditure patterns.

Friedman maintained that the political process exercised through state control of educational institutions "imposes conformity"; he believed the schools were becoming threatened with an excess of conformity. The use of educational vouchers would support a market system in which parents at the elementary level and individuals at the postsecondary level express preferences and satisfy personal tastes by deciding on the institution they will attend. Friedman claimed that "the subsidization of institutions rather than of people has led to an indiscriminate subsidization of all activities appropriate for such institutions, rather than of the activities appropriate for the state to subsidize. (1962, p. 100)."

Economics of Vouchers

Under Friedman's proposed voucher system, individuals would receive sums of tax monies equal to the cost of educating an individual in the public sector. This process would foster diversity in education, permit competition, improve the schools and institutions, encourage a healthy variety and flexibility, and make teacher salaries responsive to market forces. The role of government in education would be limited to distribution of vouchers and imposition of minimum education standards at each level of schooling.

The institutions themselves would be required to charge tuition equal to the actual cost of education per student, except where endowment and private gifts allow them to charge reduced prices. In order to attract students, they would be competitive and offer programs at least perceived to be of high quality or of importance to the education of the individual. Friedman believed that any government schools retained under a voucher system should charge tuition which would cover educational costs and should compete on an equal level with traditionally non-government supported schools.

The proposal to subsidize education through individuals rather than through public institutions is similar to the intent of early government programs at the Federal level, which were designed for specific subpopulations of citizens and operated through a voucher type allocation of funds. The Serviceman's and Veteran's Readjustment Acts of 1944 and 1952, and the War Orphans' Educational Assistance Act of 1956 are programs through which certain individuals receive sums of Federal monies to be spent at educational institutions of their choice. Through these programs the Federal government was attempting to aid individuals who were perceived as having special financial needs for schooling; the government's interest in institutions went only so far as to require that money be used at approved institutions. These programs were also designed for the postsecondary level of education, which is understandable considering the purposes of the legislation.

Friedman had perceived a particular need to limit the role of government in education, but he and other voucher proponents go well beyond the specific role of government to the expanded role of individuals in molding the demand for and supply of education. One purpose for utilizing of vouchers is to create a "market" in the educational arena, through which consumer demand rather than product supply is subsidized. The characteristics of the market system are competition among institutions, similar prices/costs (for the product) and consumer choice among products, which is generated by similar pricing. An open market for education would necessitate the elimination of cost inequities which exist between publicly subsidized institutions and private schools which must charge tuitions based on the full cost of instruction.

LaNoue (1971) was opposed to vouchers as the panacea for economic inequities and inefficiencies in the public schools. He believed that "market place analogies" do not fit well in the field of education, because public schools are not noncompetitive monopolies. He also believed that vouchers are inefficient as vehicles for reform because voucher proponents could bring about unregulated, noncompensatory vouchers which could lead to "social disaster," in terms of racial and economic segregation.

Accountability

Advocates also maintain that vouchers will force schools and teachers to become more accountable for offering quality education at all levels of schooling. Greater parental choice and increased market competition will force accountability because parents will demand proof that students in the schools are learning. Stroufe (1971) has stated that "the importance of the voucher idea lies in its power to question, to hold up for inspection and evaluation, many of the answers our system has proposed as acceptable solutions to educational problems."[4] It is an unfortunate but well known fact that too many schools today do not offer quality education. Students are graduating from American high schools with low reading and math abilities and are unprepared for college level work. If schools are forced to improve in order to attract students under a voucher plan, perhaps the level of achievement and learning will eventually improve also.

Distributive Justice

A third compelling argument for educational vouchers is the potential for a more equitable redistribution of the benefits of education, such that low-income, disadvantaged citizens will not only have a more equal opportunity to secure a quality education, but will also have the opportunity to benefit more fully from their education. The poor education received by many low-income, minority students on the elementary/secondary level is a result of 1) inequitable school district financing generated by reliance on the property tax for funds revenue and distribution and 2) segregation of minority children in schools, due to geographic boundaries which constrain children from attending other than designated school buildings.

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[4] Speech delivered at National School Boards Association Annual Convention, Philadelphia, Pennsylvania. April, 1971.

At the present time, parents have only two alternatives if they are dissatisfied with the education offered by the local school. They can move to a community where the public schools are perceived to be better, or they can send their children to private schools. Both of these options are costly to parents, and are indicative of the oligopoly of the public school system over the educational enterprise.

Under a voucher system, each family would approach the educational marketplace with equalized resources which have been distributed to them directly from state tax revenues. The present property tax system becomes disrupted under this plan because monies are allocated equally rather than on the basis of the wealth of school districts.

On the postsecondary level, lack of equal opportunity is caused by 1) the poor achievement records of these children due to low quality elementary/secondary education, which prevents their admission to better private schools and state colleges and universities and 2) the inability of low-income people to pay higher tuitions at even those institutions which have low prices as a result of subsidization. Under a voucher system, money would be granted to students on the basis of need rather than allocated to institutions through subsidies which are equal for each student regardless of the wealth of the student's family.

An interesting argument has been raised by Ginsberg (1971) concerning the redistributive effects of vouchers. On the assumption that the goal which is the "essence" of vouchers is to improve the schooling which is available to low income and minority youngsters, Ginsberg claimed that other social programs with similar redistributive goals have failed. He cited Headstart, Title I of the Elementary and Secondary Education Act, desegregation and low-income housing as examples of unsuccessful social programs. "It is irresponsible to move ahead with even an experimental program of educational vouchers without facing up to the results of these recent efforts at distributive justice. (p. 373)."

He listed several reasons why a voucher system would be costly and would probably not reduce inequities. Ginsberg stated that "the voucher system is a gimmick. It pretends to offer a solution to segregated schools and ineffective education for the poor and disadvantaged. (1971, p. 378)." He claimed that, on the contrary, vouchers would ease the tax burden on upper middle class families with children in private schools, weaken already weak urban public schools and increase the number of poor blacks in private schools. He seemed particularly wary of the possible proliferation of "mediocre" private schools and of increased power among black nationalists in ghettos who might start their own schools.

Choice Among Options

One of the inherent non-economic characteristics of the market system is the ability of the consumer to choose among educational alternatives. Fantini (1971) emphasized the improved role of the individual in choosing among options in a diverse system. Conflict among interest groups is minimized in a competitive market because each individual parent or student makes direct decisions in educational activities which affect them. Small interest groups cannot impose ideas on others, and individual decision making is maximized in a democratic change process. Fantini did not support the use of what he termed "external vouchers" for education;[5] instead, he envisioned the growth of options within school systems. He believed that in the present school system there is a great demand for educational alternatives, but they are limited. Although "external vouchers" are designed to affect the supply of alternatives, Fantini suggested he would rather see an abundance of options within existing systems.

Newell (1971) supported vouchers because they might facilitate the provision of alternatives for all socio-economic levels and provide more opportunities for the disadvantaged. Vouchers give parents a more central role in their children's education, foster diversity and pluralism and force all schools to be more accountable. Newell felt the role of the voucher regulating agency to be important in ensuring equalized opportunity, nurturing diversity and increasing options for parents. He admitted that it was not clear that vouchers would increase accountability and diversity, nor that parents would exercise freedom to influence their children's education.

Eysenbach (1974) was also not convinced that vouchers would be efficient and equitable, because he believed they would benefit only the very poor and the very rich. His argument focused on the model of political economy in which citizens vote for a particular budget only if the marginal cost in increased taxes is less than the benefits received from that choice. He believed that, based on this model, the voting behavior of citizens would change; since vouchers influence critically the benefits received by individual voters, these voters perceive benefits as the amount a parent is willing to pay for nontransferable, noncashable vouchers. Eysenbach claimed that vouchers must be accompanied by a reduction in tax support and the freedom for parents to purchase more education than the voucher would cover in costs.

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[5] Fantini referred to popular voucher systems as external; he preferred an "internal" voucher system, in which several programmatic options are offered within rather than across school systems.

Vouchers have been heralded as a panacea to these educational problems because through them decision making power is reverted from the suppliers to the consumers of education. At the elementary level, the simplest voucher scheme would be the issuance of a standard voucher to parents for each school age child, to be used at any school of the parents' choice. Ideally, parental choice would be based on the quality reputation of the school, the type of program offered, the reputation of individual teachers and the achievement of children who have attended the school.

Rivlin (1970) has suggested that performance measures would have to be developed and made available to parents who must monitor their children's educational progress and evaluate school effectiveness. These measures should reflect various objectives of education, and might include measures of reading level, cognitive ability, oral expression, leadership and citizenship. They should be used over time, so that parents can easily assess improvement or changes in their children's behavior. Rivlin maintained that "without serious effort to improve measures of education performance and to make them available, it is hard to see how a voucher system can lead to intelligent consumer choice and consumer pressure for effective education. (p. 139)."

At the postsecondary level, the choice is more closely related to the specific program a student requires, the quality of the institution and the ability to choose an institution without regard to discriminating costs in the form of tuition and fees.

Opposition to Vouchers

Despite these arguments for the introduction of a voucher system some people believe that "much of the steam has gone out of the voucher movement."[6] Vouchers have been included in a category of bygone educational innovations, such as closed circuit TV and teaching machines, the open classroom and team teaching, performance contracting and Head Start.[7] The major antagonists in the fight against voucher reform have been the school people and institutional authorities. Their arguments against vouchers are plentiful.

Demise of Public System

Arguments expounded at all levels of education rest on the projected demise of the public school system as parents and students flock to the perceived higher quality private schools, carrying "public" subsidies with them. The fear is basic; established institutions may fail in a competitive market, and the evidence seems to indicate that those people who function within these established institutions feel threatened about losing jobs and vested interests. They are, unfortunately, more concerned about the security of the institution than the well-being of the student. They suggest that the desertion of the public school system will be followed by the proliferation of poor quality "get-smart-quick" schools and other forms of hucksterism. The fear is probably generated by recent criticism of the lack of quality in institutional public school systems, and by the mounting fiscal crises faced by most school districts, which is a result of the voters' unwillingness to pay more taxes for education, and of the declining birth rate. The Office of Education has pointed out that the collapse of the public schools argument implies that those systems are either very inefficient or very unpopular. (Beckler, 1971). Since inefficient, unpopular schools may be forced to close under a voucher system, these fears seem justified but are not compelling per se.

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[6] "Where Have All the Innovations Gone?" New York Times, (November 16, 1975), 30:1.

[7] Despite opposition ot it, the voucher idea has been given serious thought as an alternative to the present educational system. See Carnoy and Levin (1976), Fantini (1976) and Rist (1972).

In fact, vouchers are intended to "generate needed change by altering existing misallocations of resources between rich and poor children....The true merit of the current interest in educational vouchers is that it has provided a new way of looking at the problem of delivering quality education to dissatisfied consumers. (Fantini, 1972. p. 368 and 373)." "It is necessary to view a voucher plan as a systematic political restructuring of schooling, rather than simply as another pie to be carved up by existing interest groups, if we feel any confidence at all that vouchers will create objective conditions for solving school problems instead of being simply a reflection of existing inequities and inhumanities of public schools. (Arons, 1971. p. 73)."

At the postsecondary level, the problem is slightly different because students are not compelled to attend the local public school. But the situation may be considered analogous because low-income students, who are usually not accepted at better postsecondary institutions, are forced to attend low cost public community colleges which are located in their county of residence. These community colleges, although successful in achieving the expressed goal of universal access to higher education, have been considered unsuccessful in graduating and transferring large numbers of students. The attrition rate is high, particularly between the first and second years; this is true even when considering specialized one-year certificate programs. In New Jersey, for example, the number of students who earned Associates degrees in the 18 community colleges did not exceed 11% of the student enrollment in those colleges in any year from 1972 through 1976.[8] In one study of community college attrition, it was found that attendance in a public community college, controlling for other variables, seems to increase the likelihood of dropping out.[9]

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[8] Statistics derived from New Jersey Department of Higher Education. "New Jersey Two Year College Transfer Students." Research Report 76-1. (Trenton, New Jersey, January, 1976).

[9] J. Karabel. "Community Colleges and Social Stratification." Harvard Education Review, 42(4) (November, 1972), p. 536.

It has been determined that lower income students are disproportionately represented in community colleges under current postsecondary financing schemes.[10] If these students were offered vouchers usable at any postsecondary institution in a state, how would their enrollment patterns change? A valid answer cannot be provided given the limited advancement in procedures for determining demand for college: it is sufficient to point out at this point that vouchers at the postsecondary level would induce a redistribution of income groups throughout the public and private sections, because cost would no longer be an obstacle to college attendance for most students. Student enrollment patterns will be discussed in more detail in Chapter III of this report.

The Church-State Issue

The Constitutional debate over public subsidies to private schools is more controversial at the elementary level on a national basis than at the postsecondary level. Voucher opponents argue that aid to private schools must necessarily cause undue entanglement of church and state affairs, which is not allowed by the First Amendment Establishment Clause of the Constitution. Other critics have argued that the voucher system is an attempt by private school supporters to "shore up" the private sector, which has experienced considerable financial stress during recent years of inflation and greater salary demands.

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[10] According to a study conducted by the New Jersey Commission on Financing Postsecondary Education, the percentages of students with incomes less than $10,000 are 32.3% in the county colleges, 26.5% in the state colleges, 21.4% in the state university and 19.2% in the independent colleges. See "An Analysis of the Monetary Benefits and Costs of Higher Education in New Jersey in 1975-76." (Princeton, New Jersey, June, 1976).

McCann and Areen (1971) have refuted some of these arguments by presenting two constitutional reasons why parochial schools should be allowed to participate in voucher systems. The first is that money is transferred from the state directly to parents, so that funds are no longer subject to the constraints of the Establishment Clause. The second reason is that the state would spend no more to educate a child in a religious school than in a secular private school. The state should be allowed to "purchase" secular services from parochial schools under a voucher system.

It is easier to claim at the postsecondary level that individuals are utilizing public money to obtain a college education, rather than that institutions are utilizing state money to further religion.

However, a few states have been involved with court cases initiated by citizens' groups who oppose the allocation of public monies to independent postsecondary schools directly or indirectly.[11] In 1975 the Supreme Court heard a case which originated in Maryland, and argued that aid to private schools is constitutional if a three part test is passed. This test includes the following components:

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[11] For a discussion of such cases, see National Commission on United Methodist Higher Education. Endangered Service. Independent Colleges, Public Policy and the First Amendment. (Nashville, Tennessee, 1976) Table 11 .

1) The law providing aid must have a secular purpose.

2) The effect of the law must not be to advance or inhibit religion.

3) The law must not foster "excessive entanglement" of government and religion.

The Court found in the Maryland case that the law providing aid is constitutional because the aid cannot be used for sectarian purposes or at institutions which offer only seminarian or theological degrees.[12] Later in 1976, the Supreme Court refused to hear on appeal on a similar case in Missouri, for which the state Supreme Court ruled a grant aid program constitutional, based on the Maryland decision.[13] These decisions should refute arguments against vouchers which are generated by fear of potential church and state entanglement.

Racial Segregation

Many voucher opponents believe the introduction of parental choice will further racial segregation rather than eliminate it. Friedman (1973) has disagreed with them by arguing that vouchers "would have precisely the opposite effect...nothing could do more to moderate racial conflict and to promote a society in which black and white cooperate in joint objectives, while respecting each other's separate rights and interests (p. 23)." Those who fear further segregation claim that white families will attempt to enroll their children in schools populated by other whites, and that blacks and other minorities will continue to be discriminated against.

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[12] See Roemer v. Board of Public Works, 49 L.Ed. 2d 179 (1976). Also see "Aid to Church Colleges Ruled Constitutional." Chronicle of Higher Education, (June 28, 1976), p. 3.

[13] See Americans United v. Rogers, 538 S.W. 2d 711 (1976), for state ruling. Also see "Supreme Court Allows State Aid to Students at Church Colleges." Chronicle of Higher Education, (December 20, 1976), p. 1.

Some voucher plans have provided for a "lottery" system, in which applicants' names are chosen at random for admission, all students have an equal chance of being accepted. Other plans provide for safeguards against segregation; although it seems to be the least powerful argument against vouchers, particularly in light of the alarmingly slow progress of existing desegregation efforts over the past decade, it is an issue which generates enough uncertainty to be a convincing argument against vouchers at the elementary/secondary level.

In postsecondary education racial segregation is related to income segregation; there is a higher percentage of black and Puerto Rican students in community colleges because they are often from low-income families who cannot afford higher priced institutions.

Political Issues

The voucher debate was influenced by the publication of a now classic document on education vouchers[14] and the announcement by the U.S. Office of Economic Opportunity that the Federal government would subsidize a number of feasibility studies for vouchers in local school districts. Numerous articles were published in journals and newspapers in

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[14] Center for the Study of Public Policy. Education Vouchers. (Cambridge, Massachusetts, December, 1970).

1971, and strong opinions were expressed almost without thought about the insecurity and feelings of threat expressed over a concept which had never been demonstrated. Vested interests and the political need for maintenance of the status quo have probably had the greatest influence on people in the consideration of voucher plans.

In a speech delivered at the 1971 Convention of the National School Boards Association, Stroufe stated that "voucherhood, like childhood, is neither good nor bad. It is simply appropriate or inappropriate." He gave several reasons why vouchers might constitute a viable alternative, such as the possibility that they might increase parental choice and control of expenditures of resource for their children, and the potential development of effective programs. He concluded that "public school spokesmen cannot afford simply to attack and reject the voucher proposals because it threatens the existing system." His message is clear but remains unacknowledged.

A voucher system had not been demonstrated anywhere in this country prior to 1971. Areen (1971) pointed out that "no full voucher plan has ever been tried. (p. 476.)" She argued then that vouchers should be given a fair test, at least as promoters of diversity and equal opportunity. As late as June 1975 the New York Times expressed concern that, whatever the merit or disadvantages of vouchers "some observers believe the concept has not had a proper test. Insurmountable obstacles have arisen almost everywhere."[15]

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[15] R. Reinhold. New York Times.

In the following chapter, these obstacles, which were in fact political issues, will be discussed and analyzed. The regulatory, compensatory voucher proposed by the Center for the Study of Public Policy, the paramters of feasibility studies conducted in Seattle, Washington, Rochester and New Rochelle, New York, and East Hartford, Connecticut and results of the Alum Rock voucher demonstration will also be discussed in Chapter II.

II

VOUCHER STUDIES AT THE ELEMENTARY LEVEL

The purpose of this section is to show that, although there has been considerable controversy about the voucher concept, the effects of vouchers have not been demonstrated at the elementary school level,[16] and the assumption that the voucher concept has failed is incorrect. The strong negative publicity over vouchers has been generated by organized voices of teachers' union leaders and school administrators who fear that public schools will not survive under a voucher system.

A Preliminary Study

In the late 1960's, the U.S. Office of Economic Opportunity recognized in vouchers a possible approach to alleviating inequities caused by neighborhood restrictions on school attended, and by differing per pupil expenditures in wealthy and poor school districts. Under a voucher system all parents of school aged children would be issued a certificate which could be taken to an approved school of their choice. The certificates would be given to the school in which the children enrolled, and the schools would submit these certificates to the government and be reimbursed according to some stipulated dollar amount per pupil.

The U.S. Office of Economic Opportunity (OEO) awarded a grant to the Center for the Study of Public Policy to study the use of education vouchers at the elementary school level in 1969.[17] The Center's final report, published in December, 1970, concluded that "vouchers are a way to encourage new alternatives for every parent (p. 2)." According to the report, these alternatives would be realized through a wide variety of educational options for elementary school children and through the removal of financial barriers which now prevent most parents from sending their children to more costly, private schools or from moving to wealthier neighborhoods where schools have traditionally been of better quality. Vouchers represent an alternative because most parents do not have regular channels through which to exercise individual control over thier children's education. Parents also do not ordinarily have the political skill or commitment to organize against unsatisfactory schooling conditions.[18]

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[16] The Alum Rock demonstration project is not considered a pure voucher system because of a specific set of restrictions imposed on it. The project will be discussed later in this section.

[17] The Center is located in Cambridge, Massachusetts. The voucher study was directed by Christopher Jencks, President of the Center, who is also Associate Professor of Education at Harvard University.

The Center stipulated that any voucher plan should have two objectives. The first would be to improve the education of children, particularly of disadvantaged children. The second would be to ensure that parents are given more control over the kind of education their children receive. The emphasis on disadvantaged children was based on the theory that a person's "satisfaction in life depends more on relative advantage than on absolute attainment...it follows then, that the well-being of American society depends less on wealth, power and knowledge than on the way these things are distributed among the people (p. 9)." The concept of distributive justice was the core of the Center's proposed voucher plan.

Although a number of alternative voucher systems are outlined in the report, a basic regulatory, compensatory model was found to be the most equitable and to constitute the best safeguard against the realization of expressed fears about vouchers (i.e. racial segregation, entanglement of church and state). The basic parameters of this regulatory, compensatory model are that:

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[18] Some educators, including Mario Fantini (1971, 1976), have advocated direct community control of schools, in the form of hiring and firing authorization and curriculum supervision, as a more viable alternative to this problem.

1) public monies cannot be used in schools which have any kind of discriminatory admission practices, which charge a higher tuition than the value of the voucher, or which withhold vital information from the public;
2) any group which started a school and conformed to voucher system guidelines would be eligible for public subsidies and
3) schools may receive extra funds by accepting economically and educationally disadvantaged students.

The plan also proposed the establishment of an educational voucher agency (EVA) to administer vouchers, ensure adherence to voucher system regulations and provide information to parents about the operation of a voucher system and the educational options from which they might choose. Approved voucher schools would be required to accept the voucher as payment of full tuition, accept at least 50% of its applicants randomly, accept all applicants until capacity is filled, agree to release appropriate information about enrollments and finances and keep strict accounts of revenues and expenditures. The Board of Education in each school district, which could act as the voucher agency, would be expected to ensure that a sufficient number of school spaces was available to the district's student population each year.

One of the most interesting aspects of the Center's voucher proposal was the set of specifications it suggested for a demonstration project. The project would have to be of reasonable duration to ensure parents of the relative stability of the program (A minimum of five years was recommended.) At least one year would be devoted to planning before the demonstration commenced. The demonstration would be held in a racially and economically mixed region, and in an area where a number of existing public and private schools could be used. All children of appropriate age in the demonstration area would be eligible for vouchers. These are not all of the specifications outlined, but they are presented here because they are equally applicable to a demonstration project at the postsecondary level.

The Center suggested that planning for demonstration projects might take place from July, 1970 to August, 1971. In fact, the first Office of Economic Opportunity funds for voucher "feasibility" studies were granted in February, 1971. It is important to note here the anticipation of the Policy Center's staff concerning the outcomes of planning for a voucher demonstration. "Political conflict might be great. Many groups would be attracted by the Federal and State monies available for the demonstration. Each group might have its own ideas about the desirable form of demonstration. Though political pressures might force the abandonment of the recommended voucher plan during the planning year, it is more likely that compromises in the structure of the demonstration would be reached to appease powerful groups. An analysis of the political situation during this period would be critical for an understanding of what people expect, want, and will get from a tuition plan. If the demonstration were seriously altered or terminated prematurely, this analysis might suggest why and how to establish a new demonstration in another location (p. 117)." As negative as this caveat may sound, it was optimistic in light of the political turmoil which ensued in every city where a feasibility study was performed.

The Feasibility Studies

Four cities were awarded U.S. Office of Economic Opportunity monies to conduct voucher feasibility studies in February, 1971. These included Alum Rock and San Francisco, California, Gary, Indiana and Seattle, Washington. Among the four cities, Alum Rock was the only one where the voucher plan, in extremely modified form, was demonstrated. In Gary and San Francisco, the studies barely commenced before opposition to vouchers prevented any further study. In Gary, for example, the idea was struck down by organized teachers during contract negotiations. Seattle did complete a lengthy feasibility study; the political forces which prevented implementation of the Seattle plan are explained below.

Seattle

The Seattle voucher plan apparently had a quick death because it conflicted with the city's busing plan, it gave aid to private schools (to which many citizens objected), the teachers fought it and only about 17% of the parents expressed interest in sending their children to other schools.[19]

The plan itself was adapted from the Center for the Study of Public Policy's "regulatory, compensatory" model, which stipulated that schools could charge no more tuition than the amount of the voucher, and which provided an incentive for schools to accept students with learning problems.[20] Information about the plan was disseminated by an appointed voucher study committee, which worked closely with the Bureau of Social Service and Research at the University of Washington, which had been subcontracted by the school district to perform the feasibility study. In the Committee's perspective, the plan provided a new way for assigning students to schools and maximizing parental choice. They believed that creation of diversity in educational opportunity would develop to the extent that parents desired.

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[19] R. Reinhold. New York Times, June 4, 1975.

[20] Seattle School District. "The Feasibility of Impliementing a Voucher Plan in Seattle." Phase II, Final Report. Seattle, Washington, March, 1972.

The voucher plan was introduced to the community through a press luncheon, a two page brochure distributed to parents and the opening of a Voucher Community Information Office. A survey of parent attitudes led to the conclusion that a "significant degree of public support did exist for vouchers." [21] Three quarters of respondents said parents should be able to send children anywhere they wanted. Over half said parents should not be given the means to start their own schools, and 41% felt parents would not be well enough informed to select their children's schools. Over half believed the voucher plan would be a "good thing for Seattle." However, the Bureau realized that parental support "appears to be most heavily influenced by a view that vouchers will permit parents to select their children's schools(p.22)." It believed the support was probably in reaction to the city's forced busing plan, which had been rejected by most citizens.

Opposition to the voucher plan was much more forceful than the mild indication of support gathered from survey feedback. Specifically, four different groups voiced objections to the plan. The first was the Seattle Teacher's Association (STA) which followed the lead of the parent National Education Association (NEA) in urging that all such plans be stopped by Federal and state legislation. The basis of the teachers' opposition to vouchers, as resolved by the NEA, was that they could lead to "racial, economic and social isolation of children and weaken or destroy the public school system." [22] The STA representative on the voucher committee in fact urged that the feasibility study which the committee had been established to conduct, be stopped. The Bureau invited the STA to participate in a number of debates, which the STA eventually backed out of on the basis that it was being used to publicize vouchers and add credibility to them.

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[21] Feedback to the survey was sparse in light of the potential survey population. Among the usable population of 395,000 were 40,000 parents of 76,000 public school children. 1,493 citizens responded to the survey, including 499 public school parents.

[22] See Seattle Times, November 15, 1971.

The Washington Education Association (WEA), in backing its local membership, suggested to the Bureau that its continued respectibility was being jeopardized in light of its advocacy role of vouchers.

The local chapter of the American Civil Liberties Union (ACLU) reminded the school district of its 1971 vote in opposition to vouchers because of the church/state issue. It did concede, however, that if the plan guaranteed that vouchers would be used for secular education only, the ACLU might support it.

Surprisingly, opposition also came from several Citizens' School Advisory Councils and the Seattle Council of the Parent/Teacher/Student Association. The Citizens' Councils, both in and out of proposed voucher demonstration areas, opposed the plan on the basis that it would increase segregation, destroy the public school system and hinder efforts toward decentralization and community control.[23] This group also opposed the surveying of parents. The Parent/Teacher/Student Association gave a simple reason for its opposition: "With the implimentation of the voucher plan we would add one more problem with which to cope in a system already overburdened with changes."[24]

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[23] See Seattle Times, January 12, 1972

[24] See Seattle Times, December 15, 1971.

The only overt supporters of vouchers in Seattle were from the private and parochial school sectors. The Archdiocesan Education Board, some small, private schools, the"Citizens for a Voucher Demonstration" and a high school booster club publicly supported vouchers. The opposition far outweighed the support.

The Bureau was forced to conclude that, despite its conviction that the plan was worthy of a demonstration, "the public reaction...suggests the plan may not be politically feasible at this time in Seattle. (p. 133)." The Bureau believed that the racial integration of the system was of higher priority to schoolpeople than any possible demonstration of the voucher plan. The Bureau did lay out a number of recommendations for the Board of Education in the event that it would continue to consider implementing a voucher system.

The first recommendation focused on the mandatory school assignment plan under which segregation and busing were to be carried out. The Bureau suggested that minimum and maximum percentages be imposed for racial mix in a building. This would give parents more choice while simultaneously achieving desegregation. The Bureau also recommended that the Board decentralize decision making and be prepared to defend diversity which would ensue under a decentralized voucher plan. (The Bureau had found that the desire for a wide variety of school choices was less important to the general population than simply having control over school assignment processes). Finally, the Bureau warned that the Board should 1) be aware of the nature and origin of opposition from educational groups, since teachers could easily undermine the success of a demonstration and

2) ensure that proper legal constraints were imposed by the Educational Voucher Agency to prevent violation of the Establishment Clause. The Board did not continue further discussion of vouchers, and Seattle withdrew from consideration for an OEO funded demonstration project.

The OEO was not discouraged by the outcome of the Gary, San Francisco and Seattle feasibility studies. This may have been due to Alum Rock's willingness to conduct a demonstration project, which commenced with the 1972-73 school year. The Federal Government subsequently subsidized feasibility studies in Rochester and New Rochelle, New York, East Hartford, Connecticut and in New Hampshire for a study in six community school districts.[25]

Rochester

The National Education Association and its state affiliates were well prepared to fight vouchers by the Fall, 1972, when a feasibility study was in progress in Rochester. Representatives from the NEA and the New York State United Teachers flew into Rochester in late November to act as resource persons to the Rochester Teachers Association (RTA) during meetings in which opposition strategies were discussed. The New York Teacher published opposition articles written by the president and vice president of the state organization and covered the RTA's activities closely during that period.[26]

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[25] The studies in East Hartford and New Hampshire were sponsored by funds from the National Institute of Education which assumed responsibility transferred from the Office of Economic Opportunity, for all voucher projects in August, 1972.

[26] See New York Teacher, November 26 and December 3, 1972.

In one article, the teacher's union denounced each provision of the major model components (as proposed by the Rochester voucher study staff) as contributing to the general demise of the public schools and to a destructive increase in the educational bureaucracy. "Approval (of the plan) would give the City of Rochester the dubious distinction of joining with Alum Rock, California, in a grandiose experiment in which children, parents, and teachers become pawns and in which the foundations of public school education are undermined, perhaps permanently and irreparably."[27] The RTA organized to mount a "massive campaign in opposition to the OEO plan."[28] One of their strategies was to solicit and gain opposition support from the AFL-CIO unions in ROchester and a neighboring county.

According to the Voucher Study Staff in its Final Report, the RTA "persistently refused to consider the possibility that the program could have any merit."[29] The Staff was particularly disturbed by the fact that the FTA's opposition campaign was confusing parents about the proposed voucher system and irrationally undermining community support for it. A number of community organizations did publicly announce support for the plan, including the Community Schools Council and a few Development and Community Associations.

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[27] Ibid, (11/26/72)

[28] Ibid, (12/3/72)

[29] Rochester School District. "Feasibility Study for the Design and Implementation of an Education Voucher System in Rochester." Rochester, New York, February, 1973.

The Voucher Staff's strongest concern was that the RTA had in many cases presented arguments against concepts which were never proposed in the Rochester plan. The teachers union was, in fact, arguing against concepts of the OEO supported plan, which apparently differed in some significant areas from the Rochester plan. When a Final Report was issued in February 1973, certain sections had been revised to respond to expressed and the RTA took full credit for the action. The Teachers union believed it was fighting OEO rather than the Rochester Board of Education. The New York Teacher printed on February 11, 1973, that "The RTA has won its ten-week long, uphill battle against the OEO, turning back a voucher plan the OEO had hoped to implement in Rochester."

The implication of the union's claims and actions was that they were fighting what was perceived to be a tremendous threat to the public school system and their own positions in it. They never offered explanations as to why they feared that parents would open "quasi-public" schools, or why the public schools did not already offer high quality education. They merely claimed that improvements would certainly occur, and that the changes were undesirable. The community accepted the assumption that such changes would be destructive, despite the fact that the voucher plan had not been implemented and had not in fact been shown to cause disruptive change.

New Rochelle

The school district of New Rochelle, New York was awarded a $40,000 planning grant from OEO in March, 1972. It ran into problems immediately in working out details with OEO for a feasibility study, but a first phase study finally commenced in February, 1973. The district subcontracted a New York City consulting firm to conduct an operational feasibility study; the study was never conducted beyond that first phase because the school district found itself in opposition to the general guidelines stipulated by the OEO for implementation of a demonstration project. New Rochelle wanted Federal monies to support public school education, but was attempting in the process 1) to develop a voucher plan and 2) to ensure the school system protection from all the feared consequences of a voucher plan.

The district superintendent wrote a weekly column for the local newspaper, in which he discussed the voucher concept immediately after the grant was awarded in 1972.[30] In the first discussion he listed the major arguments put forth by voucher opponents, and stated: "I respect that body of opposition and I would make certain that any voucher proposal I recommended to the Board of Education for implementation in this city have built into it fail safe securities that these abuses could not occur either by accident or design. In fact, New Rochelle has the rare opportunity to set the parameter by its control of the feasibility study."[31]

The New Rochelle school district also saw the funding of a voucher system as important because it would provide the district "with the funds to develop the positive elements of the present system and alternatives to trace elements in the present system that seem to need reform. It would pay for modifications to existing facilities, program development, staff retraining, administrative and other support services, materials development, transportation, and any of the other many costs associated with the program refinement."[32] Preliminary plans for a voucher system in New Rochelle were developed during the months between February and October, 1973, without community participation. In his column of October 12, 1973, the Superintendent addressed the issue of community participation. He acknowledged that, although the public had purposefully not been informed about the specifics of the New Rochelle adaptation of a voucher system, the situation represented a strength rather than a weakness in the plan. He reminded his readers that feasibility studies in other cities had "ended in a negative way," had not resulted in implementation of a voucher system, and had created deep divisions among staff and community. He said that New Rochelle had decided not to test the political feasibility of a voucher system until it had determined the operational feasibility, thereby avoiding the "upset" of testing the concept on the people. He then proceeded to outline details of the plan, and listed several objections raised by the Board of Education to the first phase model.

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[30] See Standard Star, March 10, 1972.

[31] The Superintendent was in favor of the study because he wanted to try to show that vouchers could improve educational quality and provide equal educational opportunity. He welcomed additional income for a study the district was not able to afford on its own.

The NIE was also dissatisfied with the plan developed by the consultants to the New Rochelle school district. In a letter of October 9, 1973, the NIE indicated that the district's plan and the Board's recommendations on it were "directly at odds with the voucher concept itself on five basic points: 1) the Board wanted a guarantee that parents could elect neighborhood schools; 2) the creation of alternative options was restricted; 3) the Board did not believe it necessary to have a separate voucher administering agency; 4) funds following children were not "voucherized" in that an equal dollar amount actually followed each child to a chosen school and 5) the proposal called for a high degree of centralization. It was clear that New Rochelle had an interest in implementing a voucher system which did not go as far as the Alum Rock project, let alone beyond it. Additional funding for further study of a voucher system for New Rochelle was not granted by NIE.

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[32] Standard Star, February 9, 1973.

The school district claimed that their model was unacceptable to NIE for different reasons, but primarily because the objectives of the funding agency were "national in scope and research oriented," while the district's objectives were "local in scope and operationally oriented." A few "conflicts" generated by these different approaches focused on the number of students in the study population (the government wanted 4,000 and the district said 4,000 was too large a sample), the issue of desegregation (to which the district believed NIE was indifferent) and the timetable for implementation (the district wanted more time). The district concluded that "a voucher type system is feasible in New Rochelle;" and "the NIE voucher model is not feasible in New Rochelle." [33]

An editorial in the local newspaper the following day summed up the political opposition to vouchers in New Rochelle: "The failure of the voucher idea could have a positive effect if it finally convinces enough people that the proper course is not to flee from the democratic, all-purpose public school system in favor of educational modes fashioned in the parents' image."[34] The conclusion was not based on experimental evidence.

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[33] School district press release of October 19, 1973. In an analysis of this interaction, the Standard Star (October 24, 1973) pointed out that there had appeared to be little attempt on either side to compromise positions.

East Hartford

The East Hartford School District Superintendent initially contacted the Center for the Study of Public Policy in December 1973 to discuss the voucher concept, and later submitted a grant proposal to NIE for a planning study, which was conducted between February and April, 1974. The district approached the voucher feasibility study from an extremely conservative perspective, preferring to call their adaptation of a voucher model an "Open Enrollment Program."

Little focus was given to the market model concept of vouchers or the goals behind them. The Feasibility Report of May, 1974 stated simply that the federal government was attempting to determine whether or not increased parental control over the allocation of education funds produces improvements in the quality of education and greater satisfaction with quality.

The Board of Education had already established an open enrollment transfer policy in the district, which allowed parents to request transfer of their children to another school, as long as they provided necessary transportation. A sum of district money was transferred to the receiving school with the student; the district referred to this sum as an "educational scholarship." Only 100 pupils had transferred under the open enrollment program at the time of the feasibility study.

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[34] Standard Star, October 24, 1973.

For the study, the Board also sub-contracted with consulting groups to perform analyses of school capacities, enrollment projections, a community survey, transportation costs and legal implications. The latter two studies resulted in some disturbing predictions. It was suggested, for example, that if only 7.5% of the student population opted to transfer to other schools under a voucher system, the district's bus transportation budget would double. The legal analysis indicated that there would be a constitutional question over the issuance of public monies to certain private schools which might participate.

A community survey indicated that 60% of parents favored an expanded program. A staff survey showed that only 38% of teachers and building administrators favored the plan and 25% were adamantly opposed. Over half believed the plan would generate "unhealthy competition" among schools. On the basis of these results, the study group recommended that the school district apply for an additional planning grant from NIE. The district was not at that time prepared to conduct a demonstration of the voucher.

The East Hartford Education Association conducted its own survey of members in May, and reported that 81% were opposed to the plan.[35] The group urged the Board of Education to reject the open enrollment concept. Additional opposition was expressed by local newspaper editors and other citizens.[36] Despite this opposition, the Board of Education voted in June to allow the school district to request additional planning funds from NIE.

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[35] Hartford Times, May 14, 1974.

[36] See East Hartford Gazette (February 14 and April 29, 1974) and The Hartford Times (April 4, 1974).

The funds were granted, in the amount of $387,000, and a second study was commenced in February, 1975. The purpose of the study was to simulate the effects of the five components investigated during the earlier study. The resulting costs, according to Project Director A. Esposito, were actually lower than the costs projected by sub-contracted consulting groups. The study also projected that, when the Federal government withdrew from funding the proposed five year voucher project, district tax levies would be raised only two mills to continue expenditure levels attained during the voucher demonstration.

The Board of Education voted against the plan in January, 1976. The apparent reasons for rejection of the plan were fear of government involvement in district activities, fear of too much centralization between the school district and neighboring Hartford and lack of support of school district administrators.

The district did benefit from the simulation study; the open enrollment policies and inservice training for teachers developed during the study have become established components of the school district's educational policies.

Kent, England

The debate over vouchers has also moved to England. The December 4, 1974 issue of The Times Educational Supplement carried two articles, the first describing preliminary results of the Alum Rock project[37] and the second opposing the concept of parental choice of schools.[38] The authors of these articles were apparently viewing vouchers from differing perspectives: The first author concluded that, although vouchers did not produce radical change in Alum Rock, "A solid start...may gradually result in something profound." The second author believed that freedom of parental choice "must be detrimental" to schools, children and education, because a situation in which "parents made the rounds of accessible schools inspecting and questioning the staffs" would be "impossible." He also believed that a school's "popularity" would depend on the social mix of its pupils.

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[37] J. McCurdy. "A Market System." The Times Educational Supplement, (December 4, 1974, p. 24).

During the following month the Kent (England) Education Committee announced plans to consider a voucher program in the region.[39] The Committee was being advised by an economics lecturer from York University, London, who was conducting a feasibility study of vouchers for England. The director of the Kent school region indicated that he had received a large volume of letters supporting a voucher system, and believed that support to be a "grass roots movement."

An article written by the economics consultant in August of that year,[40] argued that the state should cease to provide education and simply provide access through vouchers. This move would give real choice to parents and bring about cost-effectiveness in schooling. Education would become more flexible, able to respond to demand, and local authorities would regain some genuine autonomy.

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[38] W.E. Stephens. "Some are More Equal Than Others." The Times Educational Supplement, December 4, 1974, p. 1.

[39] P. Venning. "Kent May Try Out Voucher System." The Times Educational Supplement, January 17, 1975, p. 3.

[40] A. Maynard. "Economists Press for Trial Voucher Scheme." The Times Educational Supplement, August 8, 1975, p. 5.

The following February the Kent Committee decided to allocate 10,000 pounds for a voucher "probe," to be conducted in the region's education department.[41] The deputy education officer of the region said that "the county feels someone must do a study of them somewhere." The emphasis of the study would be on details rather than merits of vouchers. The National Union of Teachers in Englad subsequently condemned the Kent Committee for spending the money on a voucher study. The study is expected to be available soon.

The Alum Rock "Voucher" Demonstration, 1972-1976

The voucher demonstration project in Alum Rock, California has been the only demonstration of vouchers at the elementary level. It was funded by the Office of Economic Opportunity and the National Institute of Education for four school years. During that time extensive analysis of the political and academic issues generated by the demonstration project was performed by the Rand Corporation, which was the official evaluator of the project for the Federal government.[42]

Essentially, the demonstration was based on a compromise "transition" model, which was developed because the State Legislature had failed to pass a bill allowing private schools to participate in a voucher system. After completing a feasibility study in 1971, the district planned a demonstration in only six months; the superintendent did not want the "opposition" to have more time to mobilize against the project. In April, 1972, six schools out of 24 in the district decided to participate, and 22 "mini school" programs were developed in six weeks. (Mini schools were autonomous programs within a school.) In the 1975-76 school year, 14 schools were participating in the voucher program, with 51 "mini schools."

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[42] See in particular Weiler (1974) and Levinson (1975, 1976).

From the beginning, the Alum Rock demonstration was not considered a pure voucher project, in that the school district maintained certain constraints to protect schools and personnel from "losing" in the educational market.[43] Basically, participation in the project was restricted to public schools only and teacher job security was guaranteed despite market demand.[44] These imposed constraints served to hinder a demonstration and an assessment of a true voucher system operating in Alum Rock was impossible.

For this reason, questions about issues raised most strongly by voucher opponents cannot be answered as a result of Alum Rock. Since private schools were not involved, it could not be determined whether or not parents would flock to private schools and allow the public system to fail. Under district guarantees that teachers would not lose their jobs if demand for their programs decreased or terminated, they faced only embarrassment and/or transfer to a non-voucher school. The incentives for competition were not inherent in the system. Finally, because Alum Rock had already been a racially mixed school district (50% Chicano, 35% White, 10% Black and 5% Oriental), it was not possible to observe patterns of "parent induced" racial segregation.

In his analysis of the first year of the Alum Rock demonstration, Weiler (1974) concluded that the project had not revealed much about the effects of vouchers, or about taste for private schools, parent satisfaction or student achievement. By the end of the third demonstration year, test scores of students attending voucher schools had shown no marked increase or decrease in achievement over students in non-voucher schools. (Thomas, 1976). Rather, the most discernable effect of the demonstration at that point was on the changes in roles of central administrators, building administrators and teachers as decision makers in the new system.[45]

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[43] Rand changed the designation of the project from "a public school voucher demonstration" to "the Alum Rock Multiple Option System" between 1974 and 1975. The Corporation viewed the Alum Rock system as an example of "a limited free market model, contained within the existing public educational framework (Thomas, 1976, p. 2)." This is Rand's definition of a multiple option system.

[44] Rand believed that teacher job and status insecurity was "presumably one of the major sources of national teacher resistence to the voucher concept. (Weiler, 1974, p. __)."

After four years, it is apparent that the Alum Rock project did demonstrate certain patterns of behavior among parents, teachers and school administrators when functioning in a market context. The most significant of these is that parents, when faced with several alternatives in the public school system, did not exercise a substantial amount of choice among options by sending children to schools in other neighborhoods. In 1975-76, for example, about 30% of the parents chose to have their children bused to schools in different neighborhoods.[46] There is some indication, however, that parents were beginning to identify with educational programs rather than particular schools.

The second finding was that teachers, after responding enthusiastically to the freedom to create diverse and flexible "mini schools," were not prone to become competitive for more students or larger classes. Once they had secured a stable student population, they appeared contented to work with them and avoid competition. Finally, the development and operation of several educational alternatives did result in less absenteeism and less truancy, more variety in choice and more enthusiasm for school in general.

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[45] For discussion of the politics of staff interactions during the project, see cited Rand documents and the East Hartford Feasibility Study (1974, pp.200-212).

[46] This percentage may, on the other hand, be considered significant in light of the time it usually takes to implement changes.

The features which contributed to the limited success of the Alum Rock project were parental choice among increased alternatives and a decentralization in district decision making. These goals may have been achieved without a voucher system; it required the voucher demonstration, apparently, to _initiate_ radical changes in the school system.

Discussion

The voucher movement on the elementary school level in this country has apparently been successfully stopped by opposing organizations. A conference planned for this spring in Boston will be the site of general discussion about the causes and implications of the failure of vouchers at the elementary level. The causes appear to be political; they cannot be based on results of voucher demonstrations because none were conducted.

There is more hope, and more viability, for a voucher movement at the postsecondary level, where schooling is not compulsory, the choosers are students themselves, and certain problems associated with elementary level vouchers do not pertain. In the following chapter, the economics of vouchers at the postsecondary level are discussed. First, a review of "demand" studies, in which factors which most affect college attendance are isolated, will give the reader a perspective from which to view the benefits of increased student aid programs. In the next section of the chapter, a case is made for the economic viability of vouchers for postsecondary education, in terms of equity, efficiency, choice and diversity.

III

THE ECONOMICS OF POSTSECONDARY VOUCHERS

Variables Which May Affect Postsecondary Enrollments

Several statistical "demand" studies have been conducted in the last decade in order to isolate those variables which most affect the student's decision to enroll in a postsecondary institution and the type of institution in which the student enrolls. These studies are of interest in a discussion of the pros and cons of postsecondary vouchers because vouchers would alter some of the factors which are thought to influence a student's decisions about college attendance. In order to understand the potential effects of vouchers on college enrollments of different socioeconomic student groups, it is necessary to understand the relationship between the altered factors and student's decision.

An "enrollment demand model," as economists refer to it, specifies the relationship between the likelihood of a student attending college and a set of independent variables, such as price and income, which may affect the student's decision about college. The basis for the demand model is that the potential postsecondary enrollee rationally evaluates the perceived costs and benefits of alternative courses of action open to him or her, and chooses the alternative with the highest expected rate of return, including current and future costs and benefits. (Newton, 1975). The question being asked in these analyses, then, is what variables most affect the potential enrollee's decision? It has been shown in a number of studies that family income, cost of postsecondary attendance and amount of student aid awarded are major influences on the decision to attend college.

Income and Price

Campbell and Siegel (1967) concluded that 87% of the variation in aggregate demand for higher education from 1919 to 1964 was explainable in terms of historical variations in family income and the price of attending the institution. Their elasticity coefficient for income (+1.2036) showed a positive, elastic demand for higher education. This means that, as aggregate family income rises, more students are likely to enroll in college. The coefficient for price (-.4404) showed a negative, inelastic demand for college. This means that, as price increases, enrollments will decrease, but enrollments are not as sensitive to price as they would be if price showed an elastic demand for college. Campbell and Stanley proposed that among lower income groups the coefficient for price would be greater than 1.00, and therefore the demand would be negative and elastic.[47]

The authors measured the demand of those individuals who were technically qualified to exercise a preference about college attendance; demand was defined as the ratio of enrollments to the eligible population (dependent variable). Income and price were two of a number of independent variables used, but a student aid variable was not included. This was particularly detrimental to the study because it was a times-series analysis, and the changing availability of loans, Federal benefit programs and State aid programs through the 1960's could have affected enrollment patterns.

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[47] "Elastic demand" refers to the case in which demand increases or decreases by more than one percent when an independent variable, such as income or price, increases by one percent. "Inelastic demand" indicates a less substantial response to a one percent change in an independent variable.

Galper and Dunn (1969) expanded on Campbell and Siegel's study with the same data but with two basic changes. They included changes in the population of the American armed services and attempted to consider the benefits derived from the G.I. Bill as influencing enrollment. Since they were studying these short run factors, they did not include price in their analysis as an independent variable. Their coefficient for income was +.6917.

Corrazini, et.al., (1972) studied differences in demand among various socio-economic groups. They found, as in prior studies, that price has a negative influence on enrollment and income a positive influence, and that student ability influenced enrollments in a positive manner. They also included variables on 1) average earnings of production workers at the time, 2) unemployment rate and 3) father's education. None of these variables showed significant influences on enrollment.

The price coefficients were broken down by sector; they were negative for two-year colleges and four-year public universities and positive for state colleges and independent schools. One explanation for this may be that low-income students tend to enroll more often in less costly two-year colleges and are underrepresented in the high priced independent institutions.

Kohn, Manski and Mundel (1974) attempted to devise a model of college-going behavior in which potential enrollees had three decision points. These were: 1) the student must first decide whether to choose a school within commuting distance or a residential campus; 2) the student who decides to reside must choose the "best" alternative among residential campuses and 3) the student must decide whether to enroll in what is perceived as the best available college. The authors assume that the potential enrollee will enroll in college if that is preferred to the alternative of not enrolling in college.

The coefficients of their "college choice" model include costs (tuition, room and board if residing, and home to college distance if commuting) and academic quality (distance of student's SAT score from that of average student in an institution). They found that, as income rises, the demand for higher education decreases; they believe that higher income students are less likely to enroll in college if they have more attractive non-college alternatives (which high income students are more likely to have).

Two significant problems exist with Kohn, Manski and Mundel's study. The first is that the data was not current; they used 3,000 observations of Illinois high school seniors in 1966 who enrolled in college. The second problem is that they did not consider student financial aid as an independent variable. They acknowledged this weakness, but they did not have sufficient data on financial aid policies and awards.

Hoenack and Weiler (1975) estimated the potential effects of implementing a cost-related tuition policy in the University of Minnesota system. They found empirical evidence that the University could differentiate tuition charges by program costs without reducing enrollments or revenues. Cost-related tuition policies, they believed, could create incentives for students to choose more efficiently by weighing costs against perceived benefits of pursuing a specific program.

The authors also found, however, that such cost-related policies could disproportionately reduce the enrollment of disadvantaged students in high cost programs. This problem could be mitigated if "tuition exemptions" were made available to disadvantaged students.

Miller and Radnor (1970)[48] used a subset of the same 1966 student population as Kohn, et.al. They attempted to predict the demand for first year places as a function of family income,[49] cost of attendance, students' academic ability, other students' abilities and school selectivity in different institutional sectors. They did not include other family background variables, such as parents' occupation and education, or student financial aid.

The final demand equations used by Miller and Radnor focused on a cost to family income ratio, and a student ability/college selectivity to options ratio. They found that the coefficient of the first ratio was negative and significant for all of four ability (SAT) groups. The coefficient of the second ratio was negative for low ability students, who have a restricted choice set, and positive for high ability students.[50] High ability students were also not so influenced by cost of attendance.

Christensen, Melder and Weisbrod (1975) considered only three factors in determining what influences college enrollment: ability, cost and family background. They found that ability and non-income family characteristics influence enrollments. The fact that their results do not agree with results of prior studies may be accounted for by the inappropriate sample used for the study. Data was used for 440 high school seniors in 1963. Also, a random sample of family incomes between 1959-65 allowed the authors to use a family income variable. The results of the study should be discounted in light of this sample, the increase in numbers of "local, low-cost colleges," (their definition of cost) and changing social norms about female college attendance in the past decade.

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[48] This article was later published as a book. See R. Radnor and L. Miller. Demand and Supply in U.S. Higher Education. (New York: McGraw-Hill Book Co., 1975).

[49] Newton (1975) pointed out that both Kohn, et.al. and Miller and Radnor had data problems with the family income variables. In the first study, income groups rather than income data were included. Miller and Radnor were forced to rely on an unrepresentative sample of parent reporters because they believed student reporting of family income was inaccurate.

[50] Miller and Radnor concluded that lower ability students would rather work than be so limited in college choice set. This result may be invalid in light of the tremendous increase in the number of community colleges since 1966. For example, New Jersey added 17 of 18 community colleges since 1967.

In light of their findings, Christensen, et.al. recommended that restricted income transfers, in the form of income-contingent educational grants, be available to low-income students to reduce the disparity in college attendance rates for different income groups.

Student Financial Aid

Newton, et.al., (1975) studied various aspects of student enrollment in postsecondary education in Oregon. They were the first group to include some data on financial aid in their demand elasticity analyses. The authors performed an ordinary least squares regression to estimate the effect of several economic variables on freshman enrollment. Variables thought to influence demand for their model were: price, family income and other resources, demographic characteristics, student's motive for attendance and future aspriations. None of these factors substantially affected demand for higher education; that is, the factors play an increasingly smaller role in determining demand as time spent on a degree increases.

Three basic demand models were used in the study. The variables in the first model included price, mean real per capita personal income, Oregon unemployment rate, number of the 18 to 21 year cohort in Armed Forces, an investment proxy, average hourly wages of Oregon production workers and total high school graduates in a given year (proxy for eligible population). These data were computed for freshmen only. In this relationship it was found that price (-.6586) negatively affects enrollments, and income (±1.8822) and the number of high school graduates (+1.0758) are positive, elastic variables.

In a second run, regression results were shown for the same variables for freshmen, but delineated by segment (two year public, four year public and independent). The income (+5.52) and high school graduates (+3.4947) coefficients were extremely high and elastic for two-year public colleges only. Although these coefficients were positive for four-year and independents, they were inelastic. The price coefficient was negative and inelastic for all three sectors, i.e., -.8667 for two-year; -.0723 for four-year and -.0296 for independents. These figures indicate that price has more influence on attendance in two-year colleges. Such results are not surprising in light of demographic statistics on students enrolled in different collegiate sectors.[51]

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[51] For example, Newton found that 32.0% of two year college students in Oregon were over 25 (as compared to 14.7% and 4.4% in 4 year and independent colleges, respectively), and were probably employed full-time while attending college. Of those students responding, most two year college students had family incomes between $9,000 and $12,000. There are equal numbers of enrollments in four year colleges among the $9-15,000 and over $25,000 income groups. Where 32.4% of community college students have below $9,000 incomes, only 16.2% had these incomes in 4 year colleges. Students who worked full-time included 17.6% of community college students, 4.6% of state college students and 3.0% of independent college students.

Newton, et.al. explained that "we have seen no studies of demand for education which include financial aid as one of the explanatory variables." (1975, p. 144). They did a final regression, therefore, using total headcount enrollment and including data on financial aid for public institutions only. The aid coefficient was positive and inelastic (+.1572), but it was the most significant variable in the demand equation. The authors concluded that since the financial aid coefficient is only +.1572, total enrollment decisions are relatively insensitive to changes in aid monies available. However, they had found in a series of cross tabulations on survey feedback data that for students in income groups earning less than $10,000, sensitivity to aid was elastic. It is also reasonable to assume that the aid coefficient would be larger among a group of freshmen only. The significance of the aid coefficient does indicate that aid is an important factor in enrollment variation, at least among freshmen.

The authors also found that all coefficients decreased in size when all undergraduate enorllments are used as the dependent variable instead of freshman enrollments only; they believe the difference is due to the fact that students become less sensitive to changes in independent variables as they become closer to receiving a degree.

Due to the unavailability of comprehensive data, it is not possible at this time to determine how individual students would respond to increases or decreases in aid offered. This situation deprives the present study, as it did earlier studies, of the ability to predict changes in enrollments in different sectors and by income groups in response to changes in student aid.[52]

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[52] Newton in fact warned against the temptation to predict changes based on these elasticity coefficients, primarily because of data problems, collinearity and possible major structural changes in postsecondary systems.

Newton, et.al. concluded that "the students with the most elastic demand are those with the lowest income and financial resources at hand...(they) came from families of low socio-economic status as reflected by parental occupation and education levels (p. 209)." These students are most often enrolled in two year public colleges, where students were found to be most responsive to changes in price and income. Therefore, increased prices without an offsetting increase in financial aid to low income students will probably contribute to maintenance of the existing situation in which there is a disproportionate distribution of various income groups in different collegiate sectors.

Price increases could work in such a manner that income is redistributed in the direction of greater income equality, as is argued by proponents of full-cost pricing.[53] The authors conclude that "there is some sentiment in Oregon for legislative consideration of full-cost pricing and voucher financing.[54] We would like the debate over these financing alternatives to begin (p. 214)."

A Critique of Demand Studies

Dresch (1975z, 1975b, 1975c) has taken issue with what he considers to be major limitations to these demand studies which consider only demographic changes in the postsecondary system. Dresch (1975a) critiqued a number of planning models because they disregarded the environment, i.e., labor market, which influences students' decisions on college attendance.[55] The specific problems of recent price elasticity studies, according to Dresch, are that 1) they consider tuition only, and ignore financial aid, 2) it is difficult to separate supply and demand effects over times-series and cross-sectional data (i.e., results may be seriously biased because the non-price criteria for admissions are pervasive in a non-market environment) and 3) in some cross-section studies, prices faced by similarly situated individuals with similar characteristics may be identical by definition.[56]

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[53] Full-cost pricing is a financing mechanism through which tuitions are made equal to the full cost of instructional services.

[54] See discussion of Wish and deVriend (1973), Chapter IV.

[55] In his analysis, Dresch included the Federal Planning Model developed at NCHEMS-WICHE (Huckfeldt, et.al. 1973) and the Postsecondary Education Financing Model developed for the National Commission for Postsecondary Education (See National Commission 1973 and Carlson, et.al. 1974.)

Dresch also criticized these studies because, as they were conducted, the aggregative studies[57] and micro-level studies[58] had limited value. Although environmental factors were considered in the first group, elasticity coefficients are hampered by the high level of aggregation. Micro-level studies have failed to utilize important environmental elements which influence decision making, and thus must assume that the future will represent the specific past from which data is analyzed.

The solution to these problems is a consideration not only of the initial college attendance decision, but also of persistence in college decisions. The traditional variables considered in demand studies have been family income and socio-economic background, student ability, location, type of institution and price of attendance. Dresch believed a complete specification of the demand for higher education should also include the following variables:

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[56] This refers to the standardization of tuitions, for example, in a public state college system. In choosing among a # of similarly priced state colleges, the student is no longer influenced by price. However, it should be noted that the student's decision to choose a state college is often based on the moderate prices of these public institutions.

[57] Aggregative studies were performed by Campbell and Seigel (1967), Galper and Dunn (1969) and Corrazini, et.al. (1972).

[58] Micro-level studies were performed by Kahn (1969), Miller & Radnor (1970) and Newton (1975). Newton's study is less responsible for these omissions.

1) industrial composition of labor market (sectoral distribution of employment)
2) environmental (labor market) changes
3) perceived opportunity for employment
4) student financial aid
5) non-price criteria for admission, such as academic standards
6) student's perception of institution
    a) program mix and responsiveness to labor market
    b) student persistence rates
    c) faculty composition
    d) other activities mix
7) student perception of probability of admission.

He particularly advocated the utilization of more technological variables which reflect the capacity of the nation's economy to absorb college educated personnel and the effect of rapid technological growth on the college educated population.

Dresch's (1975b) argument focused on the inability of educators to predict future enrollments if technological changes affect rates of college attendance. The capacity of the economy in the past to absorb highly educated labor without lowering wages was the product of a "unique succession of economic, technological and demographic events which won't be replicated (p. 539)."[59] His own demand model focuses on the educational characteristics of the "active adult population (AAP)," defined as the population aged 25 through 64. The AAP is not distinguished from the labor market, since it is assumed "that persons not in the labor force are engaged in comparably productive nonmarket activity (p. 546)." The model incorporates 1) the wage differential between college educated (at least 4 years of college) and non-college educated labor,[60] 2) changes in the wage differential due to technological changes over time, and 3) changes in educational characteristics of entering cohorts (25 year olds), as determined by wage differentials they observed between educated and uneducated labor during their earlier eight years.

Dresch acknowledged that, due to inadequacy of available data, his model is basically unusable as a predictor of future enrollments. He believes, however, that the model indicates "the nature of the process by which the future evolves out of the past and present (p. 547)." He also referred to his model as one of educational "adaptation" rather that a predictor of enrollments. This distinction is probably due to the fact that his model allows for changes in individual behavior (i.e., opting to leave college) based on observation of changes in wage differentials.

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[59] A less technical version of this argument appears in the AAUP Bulletin, (Autumn, 1975c).

[60] This variable was used as an investment proxy by Newton (1975).

There are two related problems with Dresch's assumptions. The first is that "educated members of the AAP are defined as those who have completed 4 or more years of college (p. 845)." In light of his emphasis on technological changes, Dresch should be more than aware of the changes in postsecondary program offerings resulting from changing demands for different types of job skills. Proprietary institutions and two year community colleges have grown in popularity during an era in which high school graduates are seeking career-oriented postsecondary education in lieu of a general liberal arts background. It is possible that during the next decade a revised definition of "educated labor" will appropriately include postsecondary education which does not necessarily require four years of matriculation.

The second problem focuses on Dresch's insistence on "fixing" the educational attainments of members of the AAP at entrance, with no changes allowed after age 25. The Carnegie Commission may be optimistic (as Dresch pointed out) in predicting a 50 to 90% increase in postsecondary enrollment by 2000, but their predictions are based on the growing interest of older adults in returning to school for a college education or specialized program.[61] If even a small percentage of these newly educated people are counted as non-educated labor, but in fact their salaries are based on their educational attainment, the wage differential will become distorted. It is important that the number of educated versus uneducated members of the AAP be reassessed periodically, even if they must become "retired" and the "reentered" in order to keep the ratio accurate.

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[61] See Carnegie Commission on the Future of Higher Education. Priorities for Action. (New York: McGraw-Hill, 1973).

Summary

Despite these conclusions, it is apparent that none of the demand studies conducted to this date provide adequate information about valid predictors of future college enrollments. In essence, the demand studies indicate that at least income and price of attendance are variables which significantly influence the decision to enroll in college. The financial aid variable was included only in the study by Newton (1975), who was forced to use general categories of aid due to lack of detailed information.[62]

The core of the problems currently encountered by those attempting to predict enrollments is a general lack of comprehensive and stratified data about all aspects of higher education, but particularly about student financial aid for sectors, subgroups or individuals. Newton (1975) and Kohn, et.al. (1969) cited the lack of data as detrimental to their studies. Because of this obstacle, the determination of demand elasticities is not attempted in the present study. It is hoped that the appropriate data will be generated in the future so that comprehensive analyses may be performed on relevant variables. The tentative results of past demand studies will be considered in general terms for the purpose of enhancing the present discussion about student aid vouchers.

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[62] It should be noted here that Newton had the cooperation of the State of Oregon, which keeps excellent student aid records relative to most other states, and from the U.S. Office of Education, which provided information on Federal financial aid to Oregon higher education for a 15 year period.

The Case for Postsecondary Vouchers

Equity and Efficiency

A number of studies which do not attempt to generate an enrollment demand model have supported the conclusion that income, price and student aid do influence college attendance and persistence.[63] These three variables are interrelated in some way, and are particularly elastic for lower income students. This is probably true because, in all of the states, public institutions receive the greatest proportion of the appropriated higher education budget.[64] With this subsidy, the public institutions have been able to price tuition well below the cost of instruction, so that students are charged from 25% to 30% of actual cost. All students pay the same costs; the family's ability to pay more, if not all of the costs of attendance, is not considered.

"The reliance on institutional support, with subsidization of students taking the form of significantly below-cost tuition to all students, is objected to on grounds of allocative inefficiency and adverse redistributive effects (Dresch, 1973, p. 337)." Allocative inefficiency results from failure of students to accurately measure the relative costs of attendance at different colleges because the tuition they pay at public institutions does not reflect actual costs of instruction. In other words, they are misled about the price of attendance at public and independent institutions, because the cost is misrepresented through a large tuition gap between the two sectors. Adverse redistributive effects are the inequities which result when high income students are allowed to pay the same price as low income students.[65] The issue for Dresch is not the amount of subsidization (although that is undeniably important) but the instruments through which subsidies are distributed. He advocates 1) a shift in subsidies from institutions to students, 2) a concentration of subsidies on lower income students and 3) the accomodation of all student needs through an improved, unsubsidized capital market.

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[63] Leslie and Johnson (1974) attempted to show that the market model is "tenuous" as a rationale for financing higher education, and that geography is the primary predictor of college attendance. They believed that policymakers have misinterpreted the competitive market model (as outlined by Adam Smith) in its application to higher education, particularly because competition in higher education is "non-price related." Since the voucher approach is not based on a pure market, in that both producers and consumers are subsidized to some extent, the Leslie and Johnson arguments are inapplicable here.

[64] In a Commission study of interstate comparison of nine states, it was found that public postsecondary institutions in those states received from 82% to 96% of the higher education budget. See "Interstate Comparisons of Higher Education Systems in Nine States." (Princeton, New Jersey, 1977).

The appropriation of large subsidies directly to public institutions is inequitable. The Booher Commission (1976) examined the effects of higher education financing programs in New Jersey, and found that the redistribution of tax revenues to higher education treat lower and middle income families inequitably. The study illustrated that financing programs redistribute real income from those families with incomes between $5,000 and $15,000 to families earning less than $5,000 and more than $15,000. The sources of this inequity are a regressive tax structure in which lower and middle income groups pay a larger percentage of their income in state taxes than higher income groups, and a financing system in which institutional subsidies are distributed on an unequal basis among the three public sectors. The study concluded that, even with the state's current student financial aid programs, the combined effects of a regressive tax structure and the method of distributing institutional subsidies produce a system which is inequitable.

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[65] Dresch also points out in this argument that the cultural prerequisites for entrance into college at any age, combined with financial barriers, significantly reduce the representation of the low socio-eonomic status groups. This is partially because the system ahs been slow to adapt alternative forms of postsecondary education which would impose lesser earnings loss.

The inequity is compounded by 1) the disproportionate representation of students from lower income groups in sectors which receive lower state subsidies and 2) the underrepresentation of lower income students in New Jersey's postsecondary system in general. Students from families with incomes between $10,000 and $12,000 are concentrated most heavily in the county college sector, which receives the lowest per student subsidies from the state. Rutgers University, which receives the highest per student subsidies, enrolls the greatest proportion of students from families earning over $15,000. Students in the below $7,500 income group are not enrolled in college in the same proportion as their families are represented in the general population. Their underrepresentation in college deprives that income group of the benefits which would accrue back to it through institutional subsidies.[66]

Schultz (1972) discussed college attendance in terms of an investment in human capital, and showed that a college education benefits the person in terms of increased earning potential, enlargement of the capacity to learn, and increase in entrepeneurial abilities. He believes that the present postsecondary financing system is inefficient and inequitable because it prevents many low income students from attending college unless they have unusually high ability.

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[66] This tax regressivity and underrepresentation of lower income groups may be found in most state postsecondary systems. See Machlus (1973), Windham (1970) & Hansen and Weisbrod (1969).

He said there is evidence "that an inordinate part of the subsidies to higher education is used to provide higher education services below cost to the growing proportion of students who come from families who have the income and wealth to pay the full cost...The educational investment behavior of these families would not change appreciably if they paid full cost (p. 52)." Schultz is not requesting higher money allocations, but a specific choice of activities to be funded, such as the subsidization of needy students. "To be allocatively efficient, such subsidization (of needy students) must go directly to students and not into funds of colleges and universities, leaving it to them to distribute the financial aid to students by all manner of standards (p. 524)."

The Carnegie Foundation (1975) found that, for college age groups, enrollment is heavily stratified by family income: in 1973, 56% of the age group with family incomes over $15,000 were enrolled in college, while only 15% of the age group with family incomes below $3,000 were enrolled. The Foundation believes that enrollment among low income students would increase substantially under a "fully funded universal access system." The Foundation has estimated that, if opportunity for access is well-funded through some specific public policy, enrollments of low income students would rise by about 50% of present enrollment levels.

Choice and Diversity

It has been found that a significant percentage of the decline in private school enrollments in recent years is due to differences in tuition and fees between tax supported institutions and independent colleges (Wish, 1972). Although other factors have interfered with enrollments in private colleges,[67] the most influential variable is the below cost pricing of publicly subsidized institutions.

Wish believed that all postsecondary institutions should be treated alike; they should all be run as government entities or be allowed to compete with one another on a comparable basis. A valid way to achieve this end is to allocate the tax-generated subsidies to citizens who desire and qualify for postsecondary schooling.[68] These subsidies would be given in the form of vouchers, and little or no institutional support would be given. Tuition prices would be based on full-cost of instruction in both public and independent sectors.

The use of vouchers to students in place of institutional subsidies could lead to a greater diversity of postsecondary institutions in response to student demand, which would be backed by new buying power. Greater student choice would encourage the stimulation of "demand induced changes in the structure, content and diversity of higher education (Dresch, 1973, p. 340)." A study performed to determine the needs and resources of undergraduate students concluded that institutional choice of New Jersey students is "very much influenced by financially related factors and considerations. If paying for an education were not a problem, many students would change the type of institution they attend (CEEB/Brookdale Associates, 1975, p. III-9)."[69]

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[67] One factor may be the construction during the last decade of two year colleges within commuting distance of most citizens.

[68] Wish pointed out that some of the objections raised to the proposed use of vouchers on the primary education level may be more easily resolved or even considered irrelevant for higher education.

Wish and deVriend (1973) contended "that if the interaction between the demand for educational services and the supply were more realistic... in a system that was more akin to the marketplace with consumers more at liberty to direct their demand to any product they preferred...greater flexibility and economy would result. Increased competition among alternative institutions could lead to greater responsiveness, an increase in educational quality, and lower costs (p. 9)."

An outcome of this policy is that public institutions might raise prices to compensate for reduced institutional subsidies; tuition prices would be based on full cost of instruction in public institutions, as they are in independent institutions. The Carnegie Commission (1973), aware of this problem explained that the benefits of reduced institutional subsidies outweighed the apparent disadvantages of higher tuition. "We regret the necessity of recommending any rise in public tuition, but (a) public tuition has been lagging behind private tuition very considerably in recent times, (b) greater equity in treatment between high and low-income students requires some rise in tuition for those who can pay as well as more subsidies for those who cannot, and (c) public tuition is less of a burden on many families than it once was as the general level of income has risen...Additionally, the competition between public and private institutions is now too heavily based on price considerations alone. Both systems would benefit if the competition were based more on quality of effort (p. 10)."

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[69] The study found that, although these students would prefer to attend another institution, they are generally satisfied with the institutions in which they are enrolled.

Students would be better able to choose a preferred program on the basis of its quality rather than its cost. As more programs are chosen due to their perceived quality, an incentive will be provided for institutions to meet the quality demands of students. Institutions should consequently become more competitive in the postsecondary system.

In examining the results of a shift to full-cost tuition in New Jersey's public institutions, Bearse (1973) concluded that full-cost pricing would not be a viable alternative without concomitant adjustments in grant and loan programs. The potentially negative impact of full-cost pricing on low-income students and public institutions could be mitigated if the state shifted its subsidies from institutions to students. Bearse explained that "subsidies to individuals have the merit of not biasing college choices toward public colleges just because they are cheapter...A shift of state subsidy from institutions to individuals could be expected... to broaden and deepen the set of educational choices available to New Jersey residents."[70]

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[70] Bearse recommended that the NJ Commission consider shifting subsidies to individuals. As stipulated in the Commission's final report, it recommended a shift from a 87.2%/12.8% split to a 71.6%/21.4% split between institutional and student subsidies, allocated from the higher education budget (not including line-item and capital allocations).

Bearse found that enrollments in New Jersey institutions would have been 55% higher if the rate of college attendance of all high school graduates had been equal to the rate for families with incomes over $15,000. He concluded that 1) low-tuition is a highly inefficient way to progress toward state goals of equal opportunity and 2) non-price barriers to equal opportunity are equally important.

Nerlove (1972) believed the "spectacular" growth in public college enrollments between 1950 and 1967 was due to the ability to state subsidized institutions to pass their subsidy along in the form of below cost tuition charges.[71] The resulting pressure on tuition at independent institutions has had several "socially undesirable effects," including the serious financial problems at the independent colleges, which are caught between rising costs (due to inflation) and the inability to raise tuitions. Another effect is the undesirable redistributive effects of public support on income transfers. Finally, independent colleges have had an increasingly bimodal student body (high income and low income students only), even though they have often tried to diversify the backgrounds of the student population.

The unfortunate consequences of below-cost pricing are a restriction in the variety of services offered by the higher education sector and an exacerbation of the lack of diversity in the postsecondary system. Nerlove recommended three major policies which would lead to more efficient and equitable use of public subsidies. The first is a national loan program with an income-contingent repayment plan, which would mitigate some of the uncertainty or risks involved in investing in education at full-cost. The second policy is a redirection of subsidies to students rather than institutions. Finally, Nerlove proposed that "it is in the best interest of society and private institutions...that there be full marginal cost pricing of undergraduate educational services. Although public institutions could lose under this policy, their potential losses could be mitigated by removal of the demand deficiency which has existed because of market imperfections (p. 213)."

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[71] The ratio of enrollments between publics and privates in 1950 was 50/50, and in 1968 was 70/30, respectively.

Leslie and Fife (1974)[72] conducted a survey of 4,500 state aid recipients and 500 non-recipients in five states with the largest student aid programs in 1971-72.[73] Over three-quarters of the sample responded to questions about the decisions of students in their actual choice of college, preferred choice and other attendance characteristics. The authors found that aid recipients are less likely to enroll in two year colleges (due to low tuitions), more likely to enroll in state universities and more likely to enroll in small institutions. More importantly, they found that student aid results in 1) increase consumption of higher education and 2) a redistribution of students to small private, four year institutions.[74]

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[72] Leslie and Fife's results are cited here because they actually contacted individual students who had received aid awards; responses of these students are important to an understanding of the effects of aid on attendance. However, some of their conclusions may be inaccurate because they apparently misunderstood state aid programs in New Jersey, if not in other states. One conclusion, for example, was based on the finding that 97.5% of recipients of New Jersey's Tuition Assistance awards and 43.1% of state scholarship winners enrolled in private colleges. The conclusion, that aid recipients are more likely to enroll in private schools, is inaccurate in that Tuition Assistance awards can only be used in private schools and are awarded to students who plan to enroll or who are already enrolled in one.

[73] These states were California, Illinois, New Jersey, New York & Pennsylvania.

Summary

A major argument against full-cost pricing of college instruction is that it will serve to decrease the opportunity of students to enroll in postsecondary institutions. A concomitant increase in student aid monies, however, should serve to mitigate these potentially detrimental consequences.

It has also been shown that the higher a student's family income, the less elastic that student's demand is for postsecondary education. This means that higher income students can and probably would pay higher prices for the desired postsecondary education.

Student aid to lower and middle income students has been shown to have a positive effect on college attendance. The introduction of student aid vouchers for these students would substantially reduce the "effective" price of attendance for them. That is, the difference between price of tuition and amount of the student aid voucher would result in a much lower cost of attendance for income groups with less ability to pay for college.

The implications of these findings are that an increase in student aid and a decrease in institutional subsidies will probably

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[74] In New Jersey, for example, 47.9% of respondents who were State Scholarship winners and 49.0% who received Tuition Assistance Grants for attendance in private schools said state aid had been a determining factor in their decision to attend college.

1) increase the proportions of lower income students enrolled in postsecondary education, 2) redistribute the benefits of higher education more equitably and 3) encourage healthy competition among institutions which must exhibit program quality and effectiveness in order to attract students. The most important effect of a voucher program would be the ability of students to choose a postsecondary institution on the basis of perceived quality and program/career options rather than on cost of attendance.

There are a limited number of voucher programs currently in operation at the postsecondary level. These programs are discussed in Chapter IV, in terms of their purposes and benefits to the recipient student group. They should be considered as preliminary evidence that postsecondary education vouchers are a viable mechanism through which to achieve the goals of higher education.

VI

VOUCHER PROGRAMS AT THE POSTSECONDARY LEVEL

Entitlements for Non-Traditional Students

Vouchers are being used to benefit very specific groups of students at the postsecondary level. A number of voucher programs are currently in operation and there has been substantial lobbying for the implementation of a demonstration of a voucher program for lifelong education. These projects have all been designed to benefit non-traditional postsecondary students, who may not have enrolled in an institution or program without vouchers. Non-traditional postsecondary students are usually identified as 1) not belonging to the 18 to 24 year age cohort and 2) not matriculating in a four year collegiate program immediately after graduation from high school. The non-traditional student population is growing; most of the following programs were designed to meet the specialized academic and financial needs of this population.

Entitlements to Veterans

The Serviceman's Readjustment Act of 1944 made available substantial financial assistance for the education and training of veterans of the U.S. Armed Services. Legislation for the "G.I. Bill," as it is called, was prompted by a nationally perceived need to assist men who had served during World War II in readjusting to normal civilian life, and to assist the country in the transition of the economy from wartime to peacetime activities. Three subsequent bills broadened the eligibility requirements and available benefits to veterans, and a more recent bill has altered the benefit program in light of the elimination of the draft and the maintenance of a peacetime economy.[75]

Until this latest revision (which is for recent enlistees only and is not retroactive), veterans have received an entitlement of up to $225 a month to attend an educational institution full time.[76] Monthly entitlements have been available for up to 36 months, depending on length of service. The entitlement may be used for institutional training, cooperative (work-study) programs, apprenticeships or on-the-job training, correspondence and farm cooperative training.

One difference between these entitlements and a regular voucher program is that money in this case is forwarded directly to the veteran, who is personally responsible for paying the institution or program for tuition or other costs. Another difference is that the amount forwarded is not equal to the cost of education only. However, the amount of money depends on the type of program in which the veteran enrolls, thus allowing little incentive for the veteran to choose less expensive programs in order to keep more money for personal use.[77]

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[75] The revised legislation created a matching funds program in which the Veteran's Administration will match every dollar a serviceman saves with two dollars of government money. This "educational pension," drawn from both military pay and the VA budget, may be used for tuition and related expenses in educational or training programs after the service commitment is over. The plan is designed for men and women who entered the Armed Services after January 1, 1977.

[76] Some veterans receive slightly more per month, depending on number of dependents.

[77] There is more opportunity for abuse in this type of program. The Veteran's Administration has evidence of situations in which veterans enroll in, but do not complete courses, while continuing to receive monthly payments. Overpayments due to willful failure to report changes in status amounted to around $100.0 million in 1974. (Sterling, 1976, p. 11)

The veteran's assistance program appears to have been successful in providing access to education and training. By 1975, nearly sixteen million veterans (40.5% of the eligible veteran population) had received benefits under the bill, for which over $33.6 billion had been expended. Entitlement recipients have used their entitlements in collegiate institutions (40.7%), in other training programs (41.0%), for on-the-job training (13.0%) and in farm training programs (5.2%). The distribution of percentages has shifted considerably since World War II. At that time, only 28.5% took entitlements to colleges. A majority of Vietnam Veterans (53.9%) went to collegiate institutions.

It is also interesting that less than half of the potential recipient population took advantage of the entitlement program. This may have been due to several variables, some of which are important to other voucher programs. One is that the average age of veterans was different in different periods. While most World War II veterans were over 30, most Vietnam veterans were between 25 and 29. A second variable may be that the amount of the entitlement in relation to costs have varied over the years, and veterans may have passed the entitlement by if costs were considered too high.

These statistics show, however, that the entitlement program was used, and that many veterans who may not have obtained postsecondary education or training were able to do so.

The Vouchered WIN Program

The Department of Health, Education and Welfare has sponsored since 1974 a vouchered Work Incentive Program for a specific population of adults referred by local welfare agencies in Portland, Oregon.[78] These adults, most of whom are between 25 and 30, are granted a voucher for up to one year of skills training on-the-job or in a collegiate or proprietary institution. The purpose of the vouchered program is to give these individuals the opportunity to obtain the skills necessary to retain a job rather than participate in the aid to families of dependent children welfare program.[79]

Vouchers were introduced into the program in order to "free clients from the constraints imposed by (WIN)agency decisions, offer them the freedom to select types of training more consistent with individual goals, promote greater self-esteem and encourage commitment to achieving success."[80]

The program met with some resistence by WIN staff and public institutions who feared clients would enroll in private, proprietary schools and that these schools might inflate prices in order to receive the maximum $2,500 voucher. Results of the first year of demonstration in Portland showed that more voucher clients attended public schools than non-voucher clients had in the previous year, and that costs of private schools did not increase due to the voucher program.

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[78] The WIN program is a federal manpower program which has been in operation since the 1960's. Vouchers were introduced to the program in an attempt to alleviate recurrent problems caused by expectations of failure, high drop out rates and unemployability.

[79] See Richardson & Sharp (1974).

[80] "Three Year Portland Experiment Suggests Voucher Use Feasible in Helping Workers Choose Training Programs." BSSR Newsletter, "Winter/Spring 1976), p. 1.

There were changes in the characteristics of WIN clientele who chose to use vouchers, as opposed to those who participated in the program before vouchers were available. The first was an increase in clients who were not required to participate in the manpower program. A number of younger, better educated persons participated in the voucher program, thereby changing the median age from 27.4 years in the prior, non-vouchered year, to 26.5 years in the voucher year. The percentage of participants with at least twelve years of education increased from 71% to 77%. Finally, there was a general shift in types of occupational training chosen, with increases in crafts fields, subprofessional positions and data processing, and decreases in clerical and service worker choices. It appeared that vouchers had led to a wider choice of occupations for these clients, and a concomitant change in their aspirations.

Due to the success of vouchers for institutional training, they were given to a number of clients in the following year (1975) for on-the-job training.[81] Although 265 vouchers were issued at that time, clients found it difficult to secure training positions. This was partially because businesses claimed they didn't trust welfare recipients, or that they were too busy for "experiments." Also, clients were responsible for locating and negotiating with prospective employers; WIN staff members provided information and counseling, but did not intercede in arrangements between clients and employers.

Those who did secure subsidized jobs were in higher level positions and earned higher salaries than previous non-vouchered participants. It is interesting that nearly a quarter of the voucher clients did not use them because they were able to find unsubsidized employment in the course of seeking an on-the-job training arrangement. The evaluators believe this may be a result of (1) the availability of expense monies which were allowed for clothing and transportation during the job search and (2) simple exposure to job openings through information availability, ability to visit rather than call places of employment and increased interest and confidence of voucher clients.

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[81] For on-the-job training, employers are reimbursed one-half of the employee's wages during the training period, which may range from one month to one year.

The moderate success of the vouchered WIN school training and on-the-job training programs led sponsors to plan an additional demonstration site in Baltimore, Maryland for 1976. Baltimore was chosen because its clients are typically urban disadvantaged workers and more racially mixed than clients in Portland. In this demonstration, vouchers are usable for school training, on-the-job training or a combination of the two, and the time limits for training have been extended.[82]

The two most worthwhile results of the vouchered WIN program were a wider choice of training opportunities and a concomitant increase in the variety of occupations chosen by clients. The evaluators also concluded that "it seems clear that any large-scale voucher system should include a well organized labor market information system, directly accessible to clients and designed in terms of their needs (Richardson and Sharp, 1944, p. 15)."

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[82] In Portland, clients were not given this choice. They were in one program or the other.

Occupational Education and Training Grants

A program similarly designed to assist persons in obtaining job skills was initiated in 1973 by the California Postsecondary State Scholarship and Loan Commission. The program provides vouchers to students from low and middle income families who are vocationally oriented and who do not plan to matriculate in four year bachelor's degree or a three year nursing program. The vouchers are worth up to $2,000 a year for tuition plus up to $500 for equipment and related materials. They may be used at community colleges or proprietary schools for programs which last from four months to two years. The vouchers may not be used toward two years in a bachelor's degree or nursing program.

Currently, eligibility requirements are competitive, purportedly due to a lack of funds and a large number of yearly applicants. The vouchers are not available to all individuals in a designated population, as is true of most voucher programs. Instead, they are awarded to successful applicants who have passed through several steps of a screening process. The student's work and educational background, other activities, reasons for requesting the voucher and evaluation of own potential are worth up to 40% of his or her score. The high school guidance counselor's recommendation and the student's grade point average may add up to 30% to the score. A personal reference completes the application. Only 975 vouchers were awarded in 1975-76 to students selected from 11,000 applicants. Because of this selection process, many students without strong high school backgrounds are rejected, despite their potential for occupational training. Among grant recipients, the grade point average is above a B.

The program has been successful, possibly due to high selectivity. A two year follow-up survey to grant recipients showed that, among 60% who returned the survey, over half had completed community college programs and 81% had completed proprietary programs.[83] Over 70% who completed training secured jobs, although many were not related to field of training.[84]

The program in effect provides vouchers with which postsecondary students can attend a college or proprietary institution of their choice, without regard to cost considerations. The small number of voucher students in California's large postsecondary system probably does not influence competition among institutions to any great extent. If expanded and made less selective, however, the program could become a viable working demonstration of a voucher system.

Corporate Benefits Program

Employee tuition aid programs have existed for several decades in some larger corporations. Ordinarily, the employee is reimbursed by the company for some percentage of tuition costs, depending on the grade the employee received in his or her academic course. Participation in these educational development programs was minimal, i.e., usually less than 5% in most companies with tuition aid plans. Recently a few corporations have developed more expanded educational benefits programs.

The Kimberly-Clark Program

In July, 1974, Kimberly-Clark paper products Company (Wisconsin) began a three component program of employee benefits.[85] The primary component of the program is the "KimEd Account," which is an annual allotment by the company to a special educational development account for each employee. The amount of the annual allotment depends on the employee's performance rating, base salary and self-development plan, multiplied by a set of "company earnings" points. An employee may receive up to $840 each year for training or educational activity. Employees may also apply for extended education leaves (from two weeks to one year) with full pay and benefits.

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[83] These figures are high in relation to normal community college graduation rates of well below 50% (see Zwerling, 1976, p. 35) and proprietary school completion rates of about 25%. See "Trade Schools Fight the Image of Hard Sell, Poor Results." New York Times, (January 9, 1977), 8:3.

[84] For an evaluation of the program, see California Student Aid Commission. "An Evaluation of the Occupational Education and Training Grant Program." (Sacramento, 1976).

The third component is a family education savings account, in which an amount equal to 25% of the KimEd amount is allocated. The employee may also save up to $200 per year, and the Company will match 20% of employee savings. These monies earn interest and may be used for post-secondary education expenses for the employee or members of the employee's family.

These three components are based on an entitlement approach through which the employee has some degree of influence on amounts of benefits extended to him or her. The Company's interest in educational development is that its strength, creativity and future growth are based on the talents and potentialities of its employees. The fact that 35% of Kimberly-Clark's employees participated in the program during its first year lends support to the concept that people will take advantage of educational opportunities if they are not inhibited by financial barriers.

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[86] For more details see Kimberly-Clark Corporation. Money for Education. (Neemah, Wisconsin; 1974), and idem "Kimberly-Clark Salaried Employees' Educational Opportunities Plna." (1974).

IBM's Retiree Schooling

In 1976, the International Business Machines Corporation commenced a "retirement education assistance plan" for employees aged 52 and over. Under this plan, older employees can receive tuition reimbursements of up to $500 per year for five years for courses which may lead to the development of new interests or skills. This plan is, in effect, an entitlement available to all employees nearing retirement age. Under current community college and even state college tuition levels, a senior IBM employee could easily earn a degree with the $2,500 maximum allowed per employee.

The Cultural Voucher Program

An innovative program designed to attract "non-traditional" groups (i.e. senior citizens, drug abusers, indigent youth, emotionally disturbed children) to museums and other cultural sites, is in its third year of operation in New York City. The Cultural Voucher Project is funded primarily by the Fund for the Improvement of Postsecondary Education,[86] the National Endowment for the Arts and the New York State Council on the Arts. The project represents an attempt to simultaneously support economically strapped cultural institutions while providing incentives for them to be responsive to consumers. Over 75,000 consumers were represented by ten participating community groups from the city's five boroughs when the project commenced in 1974. The project now has 15 groups representing 100,000 members.

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[86] The Fund is a part of the U.S. Department of Health, Education and Welfare.

Under the voucher plan, each of the original ten groups first received $2,000 for a four month period, then received an additional $2,000 to $6,000 for the next eight months for use in any of a group of approved museums and other cultural organizations. The amount of the voucher depended on performance during the first four month period and the group's potential for arranging effective programs in the future. The groups were expected to work with an appointed liaison from the chosen cultural institution in order to arrange programs, services and other transactions. They tended not to use their vouchers for routine museum services; they were used for explicit educational programs or for assistance in planning group developed cultural events.

The Museums Collaborative, which has been organizing and administering the program, originally selected 15 of the 33 cultural institutions which submitted sample educational programs designed for specific groups. After one year of project operation, it was determined that a few of the selected institutions had consistently been utilized by community groups, while others, including one of New York's most prestigious Art Museums, were seldom utilized. The disparity in the institutions' earnings indicated that the voucher mechanism generated self-corrective community responsive services. This result indicated that, "in a classic demonstration of the virtues claimed for the voucher system, consumers had shopped around in some very sophisticated ways."[87]

The outcomes of an effective cultural voucher program should be improvement in cultural knowledge, greater public satisfaction, more personal spending on cultural activities and greater public support for culture through allocation of public subsidies.[88] The external evaluator of the cultural voucher project believes that the program is achieving these stated objectives for participating groups. "The early experience with a cultural voucher program in New York City suggests that vouchers are indeed feasible. Vouchers may prove to be the most effective way to subsidize museums and they deserve careful consideration (Bridge, 1976, p. 64)."

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[87] See "Culture Voucher Experiment: Rough Beast Slouches Toward MOMA." Village Voice, (December 13, 1976), 81:1.

[88] An advisory board for the project has been working to gain financial and political support for the program from institutions, the city, and private foundations and corporations. Current funding terminates at the end of this year.

Lifelong Entitlements

A group of researchers conducting a study for adult education in the New York State Education Department has been gathering support for the concept of entitlements for all adult citizens, to be used at any time for retraining or educational improvement.[89] The idea is based on the fact that in a changing technological society, skills become quickly obsolete and individuals require retraining in new skill areas in order to retain jobs. The purpose for State entitlements is to allows those with insufficient resources to pay for additional schooling, the opportunity to do so.

Under the most publicized of the lifelong entitlement plans, the amount of the entitlement would vary with family resources and the costs of the chosen program. Entitlements could be used at postsecondary institutions, for on-the-job training or apprenticeships, purchase of equipment and tools, counseling and placement services, or for initial payments on capital acquired for career purposes. The concept is similar to that utilized in the WIN program, but the eligible population is not limited; all citizens over 18 could receive entitlements, to be used at any time. The primary benefit of such a program would be an improved (more equitable) distribution of earnings and a more efficient use of resources.

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[89] See New York State Education Department. "Next Steps in Exploring the Entitlement Approach - Working Paper #13A." (December 9, 1975) and Kurland, N. "Lifelong Educational Entitlement: An Explanation." (New York State Education Department, Albany, 1975).

Levin (1975) believed that, under the current system of higher education financing, only those who are academically qualified to participate in postsecondary education receive financial aid. In many cases, the most disadvantaged (low income) citizens, who lack the appropriate academic background (a high school diploma, high grade point average) for admission to college, need job training and skills and do not have the resources with which to obtain them. The student aid concept should therefore be extended to a voucher approach in which a large variety of investment type training opportunities may be chosen in addition to traditional postsecondary programs.

The lifelong entitlement movement has gained initial support from the National Institute of Education, which is sponsoring the publication of a book of readings on the subject. The possible funding of a demonstration project is less certain. As Kurland (1975) has pointed out, "Whether or not there will be a movement toward a broadened educational entitlement program will depend more than anything else on political considerations both in the general society and within the educational community (p. 11)."

Vouchers for Traditional Postsecondary Students

Basic Educational Opportunity Grants (BEOG)

The Basic Educational Opportunity Grant Program was established through the 1972 Educational Amendments enabling legislation. Under the BEOG program, grant aid is provided through an entitlement directly to students for use at institutions of their choice; this was a marked departure from older Federal government sponsored student aid programs, under which funds are allocated to institutions for distribution to students at the institution's discretion.[90]

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[90] These older programs are the National Direct Student Loan Program, the College Work Study Program and the Supplemental Educational Opportunity Grant Program.

The primary purpose of the BEOG program is to improve access to postsecondary education, particularly to low income students. Through its broadened institutional eligibility guidelines, the program allows students to take entitlements to non-collegiate as well as collegiate postsecondary institutions. Where older Federal student aid programs are administered through 3,000 collegiate institutions, the BEOG may be used at any of 6,000 collegiate, proprietary and other postsecondary institutions. The result is a substantial increase in student choice, and availability of diversity, and an increase in student participation rates in postsecondary education. It has been estimated that 56% of the eligible student population participated in the BEOG program in 1975-76, during which nearly $800.0 million was expended.[91]

There is every indication that the BEOG program has increased access; low income students generally are fully represented in the program and receive larger average entitlements. In Pennsylvania, for example, students with family incomes below $6,000 received awards which averaged 50% higher than the average award given to students with family incomes greater than $18,000. Table 1 illustrates the distribution of awards for Pennsylvania students in 1975-76.

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[91] The program has experienced, however, a 12% attrition rate, i.e., the percentage of students who are awarded BEOG's but who do not show up at the college or drop out early.

Although less than half of the applicants came from families with incomes below $12,000, over 75% of the awards were given to this group of students. The total dollar awards allocated to these students represented 82.3% of the total awards to Pennsylvania BEOG recipients.

The distribution of BEOG awards to New Jersey students in 1975-1976 was similarly equitable. The county colleges, where low-income student enrollment is greater than the low-income representation in the general population, received 43% of the total BEOG monies awarded to New Jersey students. Only 10% of the BEOG money went to Rutgers University, where high income students are over-represented. The dollar allocations and percentages for 1975-1976 are shown in Table 2.

TABLE 1

DISTRIBUTION BY INCOME GROUP OF BEOG AWARDS TO PENNSYLVANIA STUDENTS, 1975-76[a]

Income Group	% in Applicant Population	% of Recipients	Average Award	Total $ Award (In $000,000)
Below $6,000	18.1%	31.6%	$1,053	$11.063
$ 6,000 - 11,999	28.8	44.3	805	11.845
$12,000 - 17,999	39.5	21.9	608	4.412
$18.000 and Above	13.6	2.2	692	.510
	100.0%	100.0%	--	$27.830

[a] Figures are derived from an analysis of BEOG awards allocated to Pennsylvania students. See Pennsylvania Higher Education Assistance Authority. "A Critical Review and Analysis of the Federal Basic Opportunity Grant Program." (Harrisburg, Pennsylvania, 1976), pp. 16-18.

TABLE 2

DISTRIBUTION BY SECTOR OF BEOG AWARDS TO NEW JERSEY STUDENTS, 1975-76

Sector	$ BEOG Awards[a] (In $000,000)	% of Total Awards	Headcount Enrollment	% of Total Enrollment	Per Student[b] Award
Rutgers University	$1.766	9.0%	33,653	13.6%	$52.48
New Jersey Institute of Technology	.224	1.0	4,535	1.8	49.39
State Colleges	5.825	29.0	72,927	29.3	79.88
County Colleges	8.475	43.0	90,573	36.5	93.57
Independent Colleges	3.629	18.0	46,613	18.8	77.86
	$19.920	100.0%	248,301	100.0%	$80.22 (Avg.)

[a] $19.920 million is not the total awarded to New Jersey students in 1975-76. An additional $2.7 million was awarded to students attending proprietary and professional nursing schools.

[b] Per student awards calculated for comparative purposes only; dollar amount is meaningless, since all students do not receive awards. Number of BEOG recipients in New Jersey is unavailable.

SOURCE: U.S. Department of Health, Education and Welfare. 1975-76 Basic Grant Program. Institutional Agreement and Authorization Report (New Jersey). (Washington, D.C.; May, 1976).

Minority students are concentrated in county colleges, and those colleges with the highest percentages of minority students received the largest amount of BEOG awards. Essex County College, for example, has a minority enrollment equal to 75% of the student population. Students there received over one-third of BEOG monies which went to students in all county colleges in New Jersey.

It is apparent that the BEOG program has been successful in providing financial access to thousands of students who otherwise might not have attended a postsecondary institution. It is, as are all such programs, plagued by a few fundamental deficiencies which should be eliminated. A major problem, for example, is the insensitivity of the formula to differences in costs between public and independent colleges. This policy tends to encourage students to attend state subsidized public institutions rather than full-cost independent institutions, because the incremental cost, after accounting for the BEOG, is much higher at the independent colleges.

A number of recommendations have been made about revisions in the BEOG program in the future;[92] with full funding, changes in the family need analysis formula, and a more cost related maximum award, the BEOG program could begin to function as a real voucher system.

The Wisconsin Study

One of the first analyses of the equitable distribution of benefits and costs of higher education was performed by two economists at the University of Wisconsin for the Wisconsin Governor's Task Force on Higher Education, in 1970.[93]

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[92] Recommendations were made by the Pennsylvania Higher Education Assistance Authority (1976) and the Consortia of Higher Education (1975).

[93] See Hansen & Weisbrod. Benefits, Costs and Finance of Public Higher Education. (Chicago: Markham Publishing Co., 1969), and idem, "A New Approach to Higher Education Finance." Institute for Research on Poverty, (University of Wisconsin, 1970).

Their study conclusions were that heavy state subsidies to public postsecondary institutions in Wisconsin "undermine" the costs of college attendance, and that poor students in the state who were unable to attend college still pay taxes which are used to subsidize the colleges.

The Governor's Task Force recommended, as a result of the Hansen and Weisbrod analysis, that the state adopt a voucher system so that any "qualified" high school graduate could attend a non-profit postsecondary institution on the basis of family ability to pay.[94] Under this plan, institutions would charge full tuition rather than receive appropriations from the legislature. Students would receive, under the Higher Education Opportunity Program, grants based on the average cost of instruction in the state's public postsecondary institutions.

The advantages of such a program, the Task Force contended, were that (1) student choice would be based on type of education rather than limited by financial barriers, (2) costs would be more closely related to ability to pay, (3) schools would be more accountable, (4) higher educational facilities would be utilized fully and (5) the institutions were more likely to develop distinct educational missions, thus reducing costly duplication of programs.

These recommendations were never presented to the legislature; they were challenged by postsecondary administrators and Wisconsin higher education authorities. The state was moved, however, to work toward achieving equity in financial aid to students: by January, 1976 two revised student aid programs had been developed. The first, referred to as the Wisconsin

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[94] See Governor's Commission on Education. "Financing Undergraduate Higher Education," in A Forward Look. (Wisconsin, November, 1970), pp. 41-49.

Higher Education Grant Program-II, is a need based aid program for public school students in which a common application form is utilized. The Tuition Grant program for independent school students awards grants based on need, up to the maximum awarded in public institutions. These programs are believed to constitute major revisions in the student aid programs in Wisconsin.

It is interesting that, although Hansen & Weisbrod's work was rejected in Wisconsin, it has prompted other states to review their own student aid programs.

Review in New York

The State Education Department in New York considered the feasibility of vouchered student aid very briefly in the Fall, 1970.[95] The Department concluded that vouchers are appropriate student aid mechanisms, because they expand opportunity, result in an efficient utilization of funds and provide long range benefits to low income students who would otherwise not attend college. Vouchers would also assist independent institutions in remaining "viable segments of higher education."

The study showed an estimated standard per student budget of $3500 per year, which included $2400 as full cost of instruction, $1000 for maintenance (room and board) costs and $100 for books.

These conclusions were not presented as recommendations; it appears that the state was merely interested in determining whether or not vouchers were feasible.

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[95] See Thomson, D.R. "The Voucher System and Higher Education in New York State." (New York State Education Department, Albany, 1970).

Granted Education in Oregon

A study conducted in the early 1970's at the University of Oregon has generated state level interest in the initiation of a voucher type student aid program.[96] The primary emphasis of the proposed program is a shift from a 1.5% student subsidy and a 98.5% institutional subsidy allocation, to a 57.7% student and 42.3% institutional subsidy program by 1981. The purpose of these shifts would be to increase the effectiveness of spending for higher education, increase competition among institutions and cause greater responsiveness to students, lower costs and improve educational quality.

Oregon's higher education budget in 1972-73 was $132.0 million, of which $130.0 million was allocated to institutions for instruction and construction. Of the remaining $2.0 million, $1.6 million was used for need based student aid awards and $400,000 was awarded for achievement. Under the proposed plan,[97] to be fully implemented during an eight year phase-in period, only $55.8 million would be allocated directly to institutions. Student aid would be increased by $74.2 million, which would be used for need based grants (vouchers) and a new scholarship grant program.

Tuitions would increase to reflect the costs of education. While this would of course "upset the status quo at the public colleges," the ensuing competition among all postsecondary institutions in Oregon would lead to more controlled spending and an emphasis on providing quality educational services.

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[96] Wish, J. & deVriend, W. Granted Education. (University of Oregon, 1973).

[97] The total dollars available were assumed to be the same.

The plan also called for a modification of the responsibilities of the State Scholarship Commission, the creation of an Educational Planning and Research Agency to replace the current higher education structure, and an expanded Career and College Information Service.

The Oregon plan was introduced as a "more complete realization of concepts already present--but inadequately realized--in current student financing policies at the state level (Wish & deVriend, 1973, p. 13)." It spurred enough interest by some state legislators to be presented for discussion to the state's Subcommittee on Postsecondary Education in June, 1976 and to the 1977 legislature. The plan presented to the subcommittee contained two alternative funding levels based on (updated) 1975-76 current funding. Neither alternative required a substantial increase in funding by the state.

The Chancellor of Higher Education in Oregon prepared a statement which he read to the subcommittee on the day of the voucher discussion. He pointed out several features of the proposed voucher plan which were considered "desirable" and "consistent" with state objectives for higher education.[98] These desirable goals were to place all postsecondary institutions on an equal competitive basis, to "not discourage" the offering of high cost programs, to assure accountability and to "provide protection against the hazard of Oregon's becoming an 'island' of educational opportunity which will encourage in-migration for the purpose of qualifying for an educational voucher."[99]

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[98] See Leiuallen, R.E. "Statement to the Subcommittee on Postsecondary Education." (Oregon, June 24, 1976).

[99] Since vouchers were only for $735 or $955, it seems unlikely that a large in-migration would take place.

The undesirable outcomes of the proposed voucher plan, which the Chancellor believed could cause instability, included (1) the potential for less than full funding should more students than anticipated qualify, (2) conflict between the state's goals of coordination and cooperation and market system competitive forces, (3) a transfer rather than containment of rapidly expanding educational costs and (4) an increase in costs for graduate and professional students. He suggested that selective tuition increases and an increase in the per student subsidy to independent colleges (which is currently $425) should achieve the same goals.

It appears unlikely that a voucher system will be implemented in the Oregon postsecondary system in the near future. However, the fact that vouchers have been discussed at the state legislative level indicates that some policy makers believe vouchers might help achieve certain goals which have not been reached under current funding mechanisms.

Vouchers for New Jersey

The Office of Budget and Planning at Rutgers University investigated the status of postsecondary voucher studies in 1975. The report issued from this investigation established the following findings.[100]

1) The central concern of vouchers is to remove students' socio-economic status as a factor in making decisions about attending college and where to attend.
2) The use of vouchers purportedly increases equity and efficiency in the utilization of public funds, since the state subsidizes students on an equal basis, regardless of ability to pay.

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[100] Einstein, K. "Higher Education Vouchers: A Review and a Critique." (New Brunswick, New Jersey: Rutgers University, 1975).

3) "It is claimed by some that, by charging students full tuition, and then subsidizing individual students according to their ability to pay, taxpayers would actually save money, and in addition, equal educational opportunity would be increased."

4) Through institutional competition, institutions would be compelled to trim wasteful expenditures and become more responsive to the public.

5) "There are as yet few accepted facts about higher education vouchers and as a result, most discussion relies more on polemic rather than hard data."

6) "No proposal to implement higher education vouchers has yet progressed to the stage at which the detailed planning necessary for implementation has been undertaken."

7) "Some groups, such as the AAUP,[101] and other teacher associations, have a large stake in continuing public finance of large educational institutions, and therefore are intrinsically opposed to the voucher idea."

8) A major drawback in the study of vouchers is the lack of knowledge about the effects of implementation.

9) In order to try a voucher system, the whole method of financing higher education would have to be restructured.

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[101] American Association of University Professors.

The final conclusion may be misleading. If a voucher system were to be demonstrated, as proposed for example in Oregon over an entire state postsecondary system, the financing policy of the system would probably be restructured. However, the effects of vouchers need not be studied over an entire system. Pilot projects could be undertaken in order to determine the effects of vouchers without upsetting the operation of current funding systems.

V

VOUCHERS AND THE POSTSECONDARY SYSTEM IN NEW JERSEY

The Environment

The higher education environment in New Jersey has changed during the last decade, as it has in other states. While expansion and increasing enrollments were the norm during the 1960's and early 1970's, stabilization and decreasing enrollments are expected by the mid-1980's. In fact, national enrollments decreased by 0.7% in the Fall, 1976; this was the first time enrollments had decreased since 1951.[102]

During this time also, costs have risen substantially. A bachelor's degree earned at a private institution could cost between $20,000 and $30,000. Tuition and fee charges at New Jersey's public university, and state and county colleges have remained comparable to public college costs in other states. State subsidies, however, allow the public institutions to charge lower prices to all students, including those whose families have the ability to pay for a college education.

The inequity and inefficiency of this system will be discussed in the following pages. Enrollment and funding patterns of the current system will be outlined, recommendations of the New Jersey Commission on Financing Postsecondary Education will be discussed and two proposals for voucher financing demonstrations will be presented.

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[102] See Chronicle of Higher Education, "Opening Fall Enrollments in 1974, 1975 and 1976," (February 22, 1977) p. 6.

The Current System

Enrollment Patterns

New Jersey's public postsecondary collegiate institutions enrolled 158,868 FTE undergraduate and graduate students in 1975-76. An additional 45,536 FTE students were enrolled in independent institutions that year.[103]

Full-time/Part-time mix. The public institutions enroll more part-time students than independent institutions; this is particularly true among graduate students, who make up 75% of part-time students.[104] The ratio of full-time to part-time graduate students in independent institutions is 40% to 60%. Among undergraduate students, public institution enrollments are 60% full-time, while the independent institutions enroll 70% full-time students. The breakdown of enrollments by sector is shown in Tables 3, 4 and 5.

In-state students. Most students (97.0%) in public postsecondary institutions are New Jersey residents; state law requires that no more than 5% in state colleges and 10% in the University enroll from other states. Among those enrolled in 1975-76, only 5% at the University and 2% at the state colleges came from other states.

In-state resident enrollments at the independent institutions ranged from 21% at Princeton University to 99% at a small women's college in 1975-76. The total in-state resident enrollment in 24 independent institutions was 80%.

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[103] An estimated 18,500 students are also enrolled in the state's 28 proprietary institutions. These students are currently not eligible for state student aid, and the institutions do not receive state subsidies. However, over $2.6 million in Federally awarded Basic Educational Opportunity Grants were given to proprietary school students in 1975-76, and these students are also eligible for Federal loans.

[104] In the state colleges, where 93% of graduate students are part-time, the greatest number of students are enrolled in Master's in Education programs.

TABLE 3

UNDERGRADUATE ENROLLMENTS IN PUBLIC INSTITUTIONS, 1975-76

Sector	Full-Time N	Full-Time %	Part-Time N	Part-Time %	Total Headcount	FTE[a]
Rutgers University	25,267	75.1	8,386	24.9	33,653	28,062
NJ Institute of Technology	2,925	64.5	1,610	35.5	4,535	3,462
State Colleges	49,381	67.7	23,546	32.3	72,927	57,230
County Colleges	40,950	45.2	49,623	54.8	90,573	57,491
Totals	118,523	58.8	83,165	41.2	201,688	146,245

SOURCE: NJ Department of Higher Education, "DHE Data Brief, #13," (Trenton, New Jersey, 1975).

[a] FTE is full-time equivalent. To calculate, add total full-time to one-third of part-time enrollments.

TABLE 4

GRADUATE ENROLLMENTS IN PUBLIC INSTITUTIONS, 1975-76

Sector	Full-Time N	Full-Time %	Part-Time N	Part-Time %	Total Headcount	FTE
Rutgers University	4,420	35.0	8,233	65.0	12,653	7,164
College of Medicine and Dentistry	1,057	100.0	0	0	1,057	1,057
NJ Institute of Technology	184	18.0	836	82.0	1,020	463
State Colleges	732	7.0	9,620	93.0	10,352	3,939
Totals	6,393	25.0%	18,689	75.0%	25,082	12,623

SOURCE: NJ Department of Higher Education, "DHE Data Brief, #13," (Trenton, New Jersey, 1975).

TABLE 5

ENROLLMENTS IN INDEPENDENT INSTITUTIONS, 1975-76

Student Group	Full-Time N	Full-Time %	Part-Time N	Part-Time %	Total Headcount	FTE
Undergraduates	33,479	71.8	13,134	28.2	46,613	37,857
Graduates	5,063	39.2	7,848	60.8	12,911	7,679
Totals	38,542	65.0	20,982	35.0	59,524	45,536

SOURCE: NJ Department of Higher Education, "DHE Data Brief, #13," (Trenton, New Jersey, 1975).

Racial mix. The minority (i.e., Black and Spanish surnamed) population in New Jersey constitutes 13.0% of the total population. Minority enrollment in all New Jersey postsecondary collegiate institutions was 13.7% in 1974-75.[105] The distribution of full-time and part-time minority students in the postsecondary sectors is shown in Table 6.

TABLE 6

DISTRIBUTION OF FULL-TIME AND PART-TIME MINORITY STUDENTS IN POSTSECONDARY INSTITUTIONS, 1974-75

	Minority Students		
Sector	% Full-Time	% Part-Time	% of Total Sector Enrollment
Rutgers University[a]	80.0%	20.0%	13.5%
State Colleges	65.0	35.0	11.5
County Colleges	58.5	41.5	19.7
Independent Colleges	81.5	18.5	8.7

[a] Includes New Jersey Institute of Technology

Although enrollments in Rutgers University and the state colleges are comparable to minority representation in the general population, there are a greater number of minorities enrolled in the two year public colleges. Only 8.7% of independent college enrollments are minority students.

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[105] This is the most recent year for which comprehensive data is available.

Persistence. Students enrolled on the three campuses of Rutgers University have exhibited the highest persistence rates among New Jersey's postsecondary students, with the exception of students at Princeton University.[106] Nearly 90% of these state University students continue into a second year of college; 75% continue through four years. Among state college and independent college students, about 70% enter the second year, and between 60% and 65% enter the fourth year. Persistence rates among county college students are low; only 50% of full-time two year students, and 30% of part-time students, enter the second year of study.[107] The percentage distribution of lower division full-time students is shown in Table 7.[108]

The distribution of all classified, full and part-time students in New Jersey's postsecondary institutions is shown in Table 8. Slightly larger freshman classes are common, since student attrition is usually greatest between the first and second years. The closer the distribution is to 25% enrollments in each class, the better the persistence rates. In the case of the two year colleges, 50% in each

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[106] At Princeton, about 95% of each class persists through four years and graduates. (See source for Table 7.)

[107] None of these figures includes "unclassified" part-time students, who have not become matriculated or who are in an undetermined status at the institution.

[108] The figures in Table 9 represent simple percentages of lower division students; persistence rates are calculated by dividing the first year enrollment by the second year or fourth year enrollments.

TABLE 7

DISTRIBUTION OF LOWER-DIVISION, FULL-TIME STUDENTS, 1975-76

Sector	% First Year	% Second Year
Rutgers University	52.9%	47.1%
New Jersey Institute of Technology	53.5	46.5
State Colleges	58.2	41.8
County Colleges	67.6	32.4
Independent Colleges	58.3	41.7

SOURCE: NJ Department of Higher Education, "Undergraduate and Graduate Enrollments in NJ Colleges and Universities, by Sex and Student Level: Fall, 1975," DHE Research Note 76-2, (Trenton, New Jersey, 1976).

TABLE 8

DISTRIBUTION OF STUDENTS ACROSS FOUR POSTSECONDARY LEVELS BY SECTOR, 1975-76[a]

Sector	% First Year	% Second Year	% Third Year	% Fourth Year
Rutgers University	28.7%	25.6%	24.3%	21.4%
Institute of Technology	28.8	25.0	24.7	21.6
State Colleges	34.0	24.4	21.8	19.8
County Colleges	71.7	28.3	-	-
Independent Colleges	33.1	23.7	21.7	21.6

[a] Includes all classified full-time and part-time students.

class would indicate high persistence. The imbalances in enrollment which are reflected in the figures in Table 8 are slightly mitigated by the fact that enrollments have increased from 6% of 8% each year during the years 1972 to 1975. The growth in part-time county college enrollments was twice as great as growth in full-time, four year college enrollments. These growths, however, were not confined to first year student enrollments; data on actual growth areas is unavailable.

Persistence rates in most states' two year colleges are low, and are reflected by figures in New Jersey. However, the graduation rate of two year college students in New Jersey has not passed 11.0% of total enrollment during the past five years.[109] The average national graduation rate in two year colleges is between 25% and 50%.[110]

Program Enrollments

The majority of full-time students in four year postsecondary institutions in new Jersey are enrolled in Business, Education and Biological Sciences programs. The distribution of these students in academic programs is shown in Table 9. At the University, 11.4% of students are enrolled in biological sciences, and about 7% are enrolled in each of business, psychology and health professions. The largest number

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[109] New Jersey Department of Higher Education. "New Jersey Two-Year College Transfer Students." Research Report 76-1. Trenton, New Jersey, January, 1976.

[110] Zwerling shows that drop out rates for community college students range up to 75% during the course of two years. See Second Best. New York: McGraw-Hill, 1976, p. 35.

TABLE 9

DISTRIBUTION OF FULL-TIME, UPPER DIVISION STUDENTS IN NEW JERSEY COLLEGIATE PROGRAMS BY SECTOR, 1975-76

Program	University % Enrolled	State Colleges % Enrolled	Independents % Enrolled
Business	6.9%	12.5%	24.3%
Elementary Education	-	8.7	6.5
Special Education	-	7.0	-
Other Education	3.3	12.3	2.6
Engineering	5.5	.7	6.4
Fine Arts	4.1	8.9	4.3
Foreign Languages	2.9	1.4	2.0
Communications	1.4	7.8	1.9
English/Literature	6.0	4.3	4.4
Psychology	7.1	5.6	5.3
Biological Sciences	11.4	4.4	7.8
Math/Statistics	2.1	2.3	1.9
Economics	5.7	1.2	2.0
History	4.9	2.6	4.4
Political Science	4.5	2.3	4.7
Sociology	4.5	3.5	3.9
Theology	-	-	2.4
Health Professions	6.9	3.1	4.4
Criminology	[illegible]	4.3	-
Agriculture	4.0	-	-
Urban Studies	2.1	.3	-
All Others (less than 2% each)	13.2	6.8	10.8
Totals	100.0%	100.0%	100.0%

SOURCE: New Jersey Department of Higher Education, "DHE Data Brief, #14," (Trenton, New Jersey, 1976).

of students at the state colleges (28.0%) are enrolled in education programs and 12.5% are enrolled in business. Nearly a quarter of students in independent colleges are enrolled in business programs. These students are also more heavily enrolled in biological science, elementary education and engineering. There tend to be lower enrollments in certain fields which are nevertheless growing as promising professions. These include math/statistics, economics, communications (except in the state colleges), urban studies and environmental sciences.

The distribution of full-time and part-time students in the two year public colleges is shown in Table 10. Among full-time students, 45% are enrolled in arts and sciences and 44% in career technology programs. Nearly one-half of part-time students are unclassified; the remaining students are evenly distributed in arts and sciences or occupational programs.

Financing

The postsecondary system in New Jersey was operated in FY76 with an instructional and operational budget of $274.1 million. Most of this budget (86.0%) was allocated to the public sector institutions on the basis of number of full-time equivalent (FTE) student enrollments. The distribution of these institutional subsidies is shown in Table 11. Other allocations from the postsecondary budget included $28.2 million (10.3%) to student financial aid, $7.5 million to independent institutions (including schools of professional nursing) and $3.5 million to central higher education administration and special projects.

TABLE 10

DISTRIBUTION OF TWO YEAR COLLEGE STUDENTS IN NEW JERSEY COLLEGIATE AND OCCUPATIONAL PROGRAMS, 1975-76

Program	Full-Time Students % Enrolled	Part-Time Students % Enrolled
General Arts/Sciences	23.4%	10.7%
Business Management	8.5	8.3
Education	4.8	3.0
Fine Arts	1.8	.9
Science/Math	4.1	2.1
Social Sciences	2.0	1.0
Business/Commerce	15.8	10.2
Data Processing	2.7	2.2
Engineering Technology	5.7	2.6
Health Services	5.2	1.5
Nursing, (R.N.)	2.8	3.2
Natural Sciences	1.4	.3
Public Services	7.4	6.3
Unclassified	11.4	47.7
Totals	100.0%	100.0%

SOURCE: New Jersey Department of Higher Education, "DHE Data Brief, #14," (Trenton, New Jersey, 1976).

TABLE 11

DISTRIBUTION OF STATE SUBSIDIES TO PUBLIC INSTITUTIONS, 1975-76

Sector	$ Allocation (in 000,000)	% of Total Budget
Rutgers University (3 main campuses)	$ 82.4	30.1%
New Jersey Institute of Technology	9.9	3.6
College of Medicine and Dentistry	41.8	15.3
State Colleges (9)	70.0	25.5
County Colleges (18)	31.6	11.5
Subtotal	235.7	86.0
Other Allocations	38.4	14.0
Total	$274.1	100.0%

SOURCE: New Jersey Commission on Financing Postsecondary Education, "An Analysis of New Jersey Higher Education Expenditures, FY 76," (Princeton, NJ, 1977), Tables 2 and 5.

The largest portion of the student aid allocation, $15.9 million, was utilized for the Educational Opportunity Fund, which provides awards up to $1,000 per year to students from families with incomes of $10,000 or less. The State Scholarship Program awarded $9.2 million, up to $1,000 per student, on a competitive basis, i.e., on the basis of merit and need. Tuition aid grants are given to students in independent colleges; $2.8 million was awarded for such grants in 1975-76. A small amount of student aid is awarded to county college graduates who transfer to four year institutions. The distribution of aid awards by sector is shown in Table 12.

Framework for Alternatives

This brief sketch of the current postsecondary system in New Jersey should serve as the basis for an understanding of the alternative financing strategies presented in the following pages. In the next section, the financing recommendations of the New Jersey Commission on Financing Postsecondary Education (the Booher Commission 1974 to 1977) are outlined.

The Booher Commission was established by the Board of Higher Education to determine ways in which access, quality, equity and institutional adaptability and stability might be ensured in the face of decreasing enrollments and tightened postsecondary budgets. The Commission's final recommendations constitute a movement toward a policy in which students rather than institutions become the major beneficiaries of state aid.

TABLE 12

DISTRIBUTION OF STATE STUDENT AID MONIES BY SECTOR, 1975-76

Sector	$ Awards (in 000,000)	% of Total	% Students in Sector[a]
Rutgers University	$ 4.196	20.4%	17.8%
New Jersey Institute of Technology	.245	1.2	1.9
State Colleges	5.533	26.8	29.9
County Colleges[b]	3.986	19.3	28.1
Independent Colleges	6.651	32.3	22.3
Totals	$20.611[c]	100.0%	100.0%

[a] Percent of full-time equivalent student enrollment.

[b] Cost of attendance at county colleges is substantially less, so state scholarship awards and EOF grants per student are lower than per student scholarships for students in other sectors.

[c] An additional $7.6 million is taken by students to postsecondary institutions in other states.

SOURCE: New Jersey Commission on Financing Postsecondary Education, "An Analysis of New Jersey Higher Education Expenditures, FY 76," (Princeton, New Jersey, 1977) Table 3.

An analysis of the cost and enrollment implications of a hypothetical, fully funded, pure voucher system in New Jersey is also in the next section.

In the final section of this report two alternative proposals are made as the basis of a demonstration voucher project in New Jersey. The demonstration could take place in one New Jersey county, among a designated subgroup of New Jersey postsecondary students or for one type of student service which would benefit under a voucher system. The demonstration could be funded through an allocation of state higher education subsidies, and a National Institute of Education research grant for evaluation of the project. If implemented, the demonstration could lead to some definitive answers about the utility of vouchers as a viable financing instrument.

The Commission Model

Although the Booher Commission did not propose the implementation of a systemwide voucher program, Commission recommendations focused on a shift from institutional subsidies toward increased student subsidies, in the form of student aid.[111]

Under the Commission's proposal, the higher education budget for 1975-76 would have been $335.1 million, and the allocation to student aid would have more than doubled, from the current $28.2 million to $80.0 million.[112] This shift would have increased the proportion of student aid from 10.3% of 24.3% of the total higher education budget. The allocation to the New Jersey postsecondary institutions, either through per student subsidies or line item categories of aid, would increase from $243.1 million to $250.9 million. This change, however, represents a proportional decrease from 88.6% to 74.7% of the total higher education budget.[113]

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[111] See NJ Commission on Financing Postsecondary Education, "Financing in an Era of Uncertainty" Final Report, (Princeton, New Jersey, 1977).

[112] Includes a $2.2 million student aid adjustment fund.

Over 50,000 New Jersey students received an average of $535 in state student grant aid in 1976-77. Most of these students came from families with incomes below $12,000. Under the Commission's proposed student grant aid program, average awards would be much higher and more differentiated among income groups. For example, students whose family incomes are less than $6,000 would receive, on the average, $832 in financial aid. More than 30,000 students in thisincome group would be eligible for state aid.[114] Students with family incomes between $9,000 and $15,000 would receive, on the average, $455 in financial aid.

Students are distributed by income group in the different sectors in such a way that, although 152,000, or 85.0% of total enrollments are eligible by income level, only about 75.0% of those eligible (120,800) would receive aid.[115] This number is two and one-half times greater than students who receive aid under the current system. In addition, about 6,000 of the 18,500 students in non-collegiate (proprietary) postsecondary institutions would become eligible for state student aid.

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[113] The remainder of the budget (less than 1%) would be used for central administration and special projects.

[114] See NJ Commission on Financing Postsecondary Education, "Financing in an Era of Uncertainty."

[115] The 48,500 students in county colleges with family incomes over $6,000 would not receive aid because their expected $500 contribution would cover the cost of tuition.

The increase in available student aid monies is possible through an increase in the higher education budget and an increase in tuitions charged at the public institutions. Under the Commission's plan, the state provides subsidies to institutions which cover 60% of educational costs. Institutions may increase tuition so that it reflects at least 40% of educational costs. Students with family incomes of over $25,000 would be expected to pay the price of tuition through their own and their family's contributions. In the past, these students have paid low tuitions at state subsidized institutions when they had the financial ability to pay a larger share of the cost of their postsecondary educations.

The philosophy which provides the foundation of the Commission's proposed financing model is the market concept. If students with little buying power are subsidized directly by the state so that their buying power is equal to that of high income students, institutions will be forced to compete for students. The Commission model is far from a radical approach in which all institutional subsidies are eliminated and the entire higher education budget is allocated directly to students.

Such an approach has been opposed by institutional representatives in New Jersey, particularly in the public sector. At a public hearing scheduled by the Commission in February, 1977, these institutional representatives consistently spoke against the concept of allowing students more choice through increased buying power. Although the proposed shift in subsidy allocations was conservative, the representatives seemed to fear that decreased subsidy levels would result in decreased quality, unwanted competition and a flux of students to the private sector. The implementation of the Commission's proposals, according to these speakers, would cause chaos and instability.

The Commission also learned that students do not appreciate the implications of the market approach for them. At a public Commission meeting, students already enrolled in public institutions were opposing the decrease in institutional subsidies to their colleges; they saw the decreases as leading to poorer quality and cuts in programs and services.

A Systemwide Full-Cost Voucher

A systemwide voucher program would result in significant shifts in enrollments, large increases in tuitions and the enhancement of institutional autonomy. With the elimination of institutional subsidies from the state, tuitions would rise in the public sector as indicated in Table 13.

All students with family incomes below $25,000 would receive vouchers which would be reimbursable by the state in the amount of tuition charged at the institution in which the student enrolls. If the current distribution of postsecondary students were to remain stable under a voucher scheme (which it probably would not), institutions might expect to receive tuition revenues and student aid revenues in the amounts shown in Table 14.

TABLE 13

CHANGE IN PUBLIC SECTOR UNDERGRADUATE TUITIONS WITH FULL-COST PRICING

Sector	Tuition 1976-77	Tuition Full-Cost	Change
Rutgers University	$760	$2,765	$2,005
NJ Institute of Technology	760	3,540	2,780
State Colleges	704[a]	1,697	993
County Colleges	400	1,840[b]	1,440

[a] Based on 32 credits at $22.00 per credit.

[b] County college tuition is average of arts and sciences program costs and higher technological program costs. This would be cost of tuition without county contributions.

TABLE 14

UNDERGRADUATE TUITION AND STUDENT AID REVENUES UNDER A FULL-VOUCHER PLAN[a]

Sector		(in $000,000)	
	Tuition Revenue[b]	Student Voucher Aid	Total Revenues
Rutgers University	$13.9	$58.2	$72.1
NJ Institute of Technology	2.3	10.0	12.3
State Colleges	13.3	83.8	97.1
County Colleges	11.0	94.8	105.8
Totals	$ 40.5	$ 246.8	$ 287.3

[a] Based on 126,427 FTE resident students with family incomes below $25,000 (student aid), and 19,818 FTE students who are either not New Jersey residents or whose families earn more than $25,000 (tuition revenues).

[b] Public institutions would continue to receive revenues from student fees.

New Jersey students in independent and proprietary institutions would also be eligible to receive vouchers. However, since these institutions' tuition levels are not controlled by the state, they might raise prices in order to increase their revenues. Vouchers would therefore be valued at some maximum amount, preferably at the tuition level of the state University, or a comparable institution. Students in independent and proprietary institutions would receive no more than $2,765 in voucher aid.

Average tuitions in the independent institutions are $2,300 in low endowment institutions and $3,600 in high endowment institutions.[116] The state would probably expend about $52.0 million in vouchers to students in independent institutions.[117] This is about $39.5 million more than current allocations to independent institutions through student aid and contracted services subsidies. This would not constitute a major portion of these institutions' operating budgets. In spite of the fact that the independent institutions provide a major public service to a predominantly New Jersey student body, opposition to such a large increase in state subsidies to students in independent institutions can be anticipated.

The average tuition at proprietary institutions in New Jersey is $2,123, and about 16,000 students would probably be eligible for student aid vouchers. This would amount to a new expenditure of $34.0 million, since proprietary school students do not currently receive student aid.

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[116] High endowment institutions are considered to be Drew, Princeton and Stevens. Average tuitions are based on 1976-77 tuitions.

[117] Based on 20,525 FTE students whose family incomes are below $25,000 and who are residents of New Jersey. Tuitions and number of eligible students vary in each institution.

The total cost to the state in student aid expenditures would be close to $332.8 million, which is 86.5% of the $384.5 million projected budget, under a full-cost voucher program.[118] This is $110.0 million more than the current higher education budget in New Jersey and $48.4 million more than the proposed Commission budget. The increase in dollars may be compensated for, however, in the expected increases in student choice, diversity of options, equality in access and enhancement in quality and autonomy of institutions.

Two problems arise from this voucher model. The first is that enrollments will probably not be the same under a full voucher scheme, as the basis of this analysis assumes. The second is that a standard voucher, differentiated only by tuitions charged is inefficient, although more equitable than the current aid system.

If institutions are assured that they would experience a shift in source of revenue only, they probably would not be so adamantly opposed to a voucher plan. However, the figures arrived at in this analysis are probably inaccurate in light of expected changes in enrollment patterns, particularly among low-income students. It was shown in Chapter III, in a discussion of demand elasticity studies, that student enrollment fluctuations are most often dependent on income, price and student aid.[119]

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[118] An additional $52.7 million would be required for the College of Medicine and Dentistry, central administration and special projects.

[119] See Chapter III, "Variables Which May Affect Postsecondary Enrollments," for a discussion of these studies and expected enrollment changes.

As income increases, demand becomes less elastic; it would therefore be expected that increases in tuition would not significantly alter enrollment in college of high income (greater than $25,000) students. It has not been shown, however, and has yet to be demonstrated, how these high income students would behave if costs in all postsecondary institutions are equalized for the student. Students with family incomes below $25,000, who are guaranteed a voucher covering full cost of tuition in any public postsecondary institution and most independent institutions, will make decisions based on their chances of admission, resident vs. commuter preferences and on the perceived quality of available institutions.

It is estimated that there would be major shifts to more high cost programs among those populations already appropriately represented in colleges. Among students who would not have gone to college without a voucher, it is likely they will distribute themselves across all sectors in a way similar to current distribution.

The second potential problem, an inefficient allocation of resources, ensues when students whose families can contribute some portion to the cost of education, are given full-tuition vouchers. The Booher Commission determined that parents in the $9,000 to $25,000 income range, with two children, should be able to contribute from about $100 to $2,500 to the education of a college matriculated child.[120] The Commission also determined that most students with family incomes greater than $6,000 could be expected to save $500 from summer earnings, which could be used toward tuition charges. The implications of these expected parental and student contributions are that vouchers need not be valued at the full-cost of tuition for all students. At the same time, voucher amounts must be high enough to attract students to postsecondary institutions without undue concern over expected family contributions. It appears that some compromise could be attained through sliding scales of expected contributions for broad student income groups. This would be more equitable than a standard voucher for all students under a $25,000 income level.

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[120] See NJ Commission on Financing Postsecondary Education, "Financing in an Era of Uncertainty," (Princeton, New Jersey, 1977), Appendix I, Table 3.

The need to measure the effects of a voucher system on enrollments and college participation by different income groups, and to test the preceding hypotheses, is so great that it is surprising that more voucher demonstrations have not been conducted. It is with this perception of need that a demonstration project in which student aid vouchers are utilized is proposed in this report. Two alternative demonstration projects are presented here.[121]

Demonstration Alternative #1: Hudson County Students

For several reasons, Hudson County (one of New Jersey's 21 counties) would be a desirable area in which to implement a voucher demonstration project. The county is a densely populated industrial region in northern New Jersey, across the Hudson River from New York City. The 1975 population was 610,000 people, who constitute 7.0% of New Jersey's population. Nearly half of these people live in Jersey City; other major cities include Bayonne (13.0%), Union City (11.0%), Hoboken (8.0%), West New York (7.0%) and Kearny (7.0%).

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[121] The reader is advised that the cost estimates presented in the following analyses are predicted, and are discussed only in terms of the general parameters of potential program costs. Actual costs must be calculated if programs are implemented.

The citizens of Hudson County earn the lowest median family income of any New Jersey county and have completed the least number of years of education. About 44% of each year's high school graduating class goes on to college in the following September; close to 55% of all high school graduates in the state enroll in college each year. In 1974, Hudson County's 6,785 high school graduates represented 6.2% of all high school graduates in the state. Hudson County students who entered a postsecondary institution that September represented only 5.1% of all residents who entered college directly after high school that year.

The county is racially integrated; almost half the population is Black, 13.0% are Spanish surnamed and the remainder are white.[122]

The Hudson County College Commission

Another factor which contributes to the viability of a demonstration in Hudson County is the existence, since 1974, of the Hudson County College Commission. Prior to the establishment of the Commission, Hudson was one of only five counties in New Jersey without its own community college.[123] The New Jersey legislature, in an attempt to compensate for this need (as expressed by Hudson County), passed a law in 1974 which allowed a county without a community college to establish a college commission. The commission would be funded as other county colleges are (i.e., shared funding by state, on an FTE basis, and county), could enter into contracts with existing postsecondary institutions to provide programs for the county's students, and could grant certificate and associate (two year) degrees. The Hudson County Commission was approved by the Board of Higher Education in September, 1974.

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[122] Most of this information was derived from "A Descriptive History of the Hudson County College Commission," (Jersey City, NJ, 1975).

[123] Hudson County students comprised over three-quarters of full-time undergraduates from among these five counties in 1975-76.

History. The establishment of the Commission was the result of two years of study about the feasibility of such a project in the county. The Exxon Education Foundation initially funded a feasibility study in July, 1972, which was proposed by the presidents of Jersey City State College, St. Peter's College and the Steven's Institute of Technology (all located in Hudson County). A report was issued in March, 1973; its recommendations were apparently well received, and the Fund for the Improvement of Postsecondary Education, in the U.S. Office of Education, awarded the county a grant for the implementation of a pilot project, based on the Exxon study, in July, 1973. That September 345 students were enrolled in three "college centers" opened for the pilot project. Educational services were contracted for with Jersey City State College and St. Peter's College.

The Commission was formally established in November, 1974 and enrolled its first degree students in 1975-76. Enrollment in that year reached 1,000 headcount; state records show that opening fall enrollment was 217 full-time and 609 part-time students. Enrollment in 1976-77 is 523 full-time and 757 part-time, which equate to 775 FTE students.[124]

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[124] Demographic data about age, sex, race and income levels of these students is currently unavailable, as is information about distribution of students in participating institutions, credits earned and program mix.

Purpose. The Hudson County Commission acts as an educational "broker" (i.e., an intermediary) between students and postseconary institutions. It recruits, screens, admits and places students in one of five postsecondary institutions which are members of the Commission. These include the three institutions originally involved in the Exxon sponsored feasibility study, the Jersey City Medical Center and the County Vocational/Technical School in North Bergen.[125]

When the student has chosen a program in one of these institutions, he or she pays the Commission $15 per credit, which is the approximate current tuition rate in other New Jersey county colleges. The student than receives a "voucher" for the number of credits paid for, which is submitted to the institution in which the student enrolls.[126] The Commission pays the institution a negotiated rate per credit. At St. Peter's College, this rate is the regular per credit tuition rate. At the state college, however the Commission pays $55 per credit rather than the current $22 per credit rate. The state and county provide the difference.

The purpose of the voucher arrangement is to allow Hudson County students to obtain a two-year postsecondary degree despite the absence of a community college, at the rate students in other counties pay for attendance in two year colleges. In this way the Commission is providing a means for students who otherwise could not afford the higher tuitions at local colleges to receive an associate's degree at a considerably lower cost.

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[125] The Commission is permitted, under state law, to contract with any postsecondary institution in the state.

[126] Students enrolled with the Commission received a total of $238,918 in Federal Basic Opportunity Grants. This amounted to $343 per full-time equivalent student, and was $678 per student for the 352 students who received the awards.

Budget. The Commission received a subsidy of $333,000 from the state for an expected enrollment of 555 FTE students in 1975-76. Since the actual FTE enrollment for that year was 696, the Commission received $478 per FTE student rather than $600 per FTE student, which is the current state subsidy rate for county college students.[127]

The Commission also received $247,655 from Hudson County that year, and $235,750 from tuition and fee revenues. The resulting $816,405 operating budget was utilized primarily for instructional expenses in the form of voucher payments to contracting institutions. About 17.0% was used for administration and 10.0% was used for general expenses. The Commission calculated that it spent about $1,400 per student, which is low in comparison to per student expenditures in other public colleges. However, the Commission has had difficulty in maintaining a balanced budget because its voucher payments have been greater than total revenues.

Programs and degrees. Although the Hudson County Commission encourages career-oriented placement, most of its students (85.0%) are enrolled in general Arts and Sciences at St. Peter's College and Jersey City State College.[128] The Commission has also contracted for the provision of three technical programs, which include a three year Electronics program at Stevens Institute of Technology,[129] and an Inhalation Therapy and a

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[127] This is not uncommon; county colleges in New Jersey have not been subsidized in the past for actual enrollments, but for expected (budgeted) enrollments, which are usually lower.

[128] The Commission has encountered a problem with several students who are actually trying to obtain the first two years of a four year degree in these institutions at lower Commission rates.

[129] Stevens has developed a special program for Commission students, which is distinct from its highly rigorous engineering programs.

Technical Laboratory Assistant program at the Jersey City Medical Center. The Commission awards Associate degrees to students who have completed programs at the state college, the medical center and Stevens Institute. St. Peter's College awards Associate degrees to Commission students who have matriculated there.

Non-degree students. The Commission also operates five "college centers," in which evening college courses are offered to adults.[130] Most persons enrolled in these centers take between 12 and 15 credits in special needs areas (i.e., bilingual education, preparation in math and reading) before being counseled into regular college programs.

A former president of the Commission, Joseph O'Neill, believed it could develop as a "hybrid," serving not only students who are qualified to participate in its contracted para-professional programs, but also less prepared students who need certain training in preparation for college. He proposed in a memo to the Department of Higher Education in 1975, that the Commission might expand to specialize in developmental and remedial work for those who desire to obtain a postsecondary degree, but who are unable to perform college level work.

Non-instructional services. In order to facilitate the recruitment and processing of students, the Hudson County Commission has set up four student centers.[131] These centers provide a comprehensive set of services designed to acquaint students with career opportunities, programs offered by contracting institutions and an assessment of student abilities and potential.

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[130] These centers are located in Jersey City, Union City, Hoboken, Bayonne and Kearny.

[131] Two are in Jersey City, located near St. Peter's College and the state college. One is in Hoboken by Stevens Institute and the fourth is in Guttenberg (the North Hudson Center).

At the Journal Square Center in Jersey City, for example, the Commission operates a career diagnostic unit and a skills development unit. Personnel in the career unit accept students, evaluate their needs and prescribe need-based instructional programs for them. In the skills development unit, remedial and general education courses are offered; these courses are geared toward preparing students for specific skills requirements in career fields rather than for general competency levels.

Similar interviewing, testing, counseling and placement services are provided in the other three centers. The North Hudson Center serves primarily Cuban-Americans who require assistance in learning English.

Other Hudson County Students. In 1974 and 1975, close to 10,000 Hudson County residents were enrolled as full-time students in 46 public and independent New Jersey institutions.[132] One third of these were in independent colleges. The distribution of these students in institutions is shown in Table 15. In 1975-76, the majority of them were enrolled in Jersey City State College (30.5%) and St. Peter's College (20.2%), both of which are members of the Hudson County Commission. About 14.0% are enrolled at two of the State University campuses, in Newark and New Brunswick. Hudson County students are enrolled in all of the eight state colleges (14.5%, not including Jersey City State), and the county has one of the highest percentages (4.4%) of students attending two year colleges in other counties;[133] most of the 438 students attend Essex

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[132] Eighteen percent of Hudson County's students attend institutions in other states, this is a considerably smaller percentage than the total of students from New Jersey who go out-of-state (45% to 50%).

[133] A greater percentage (6.7%) of students from Gloucester County attend two year colleges in other counties.

TABLE 15

DISTRIBUTION OF FULL-TIME HUDSON COUNTY STUDENTS IN NEW JERSEY POSTSECONDARY INSTITUTIONS, 1974-76

Institution	Number Enrolled 1974-75	Number Enrolled 1975-76	Percent of Enrolled 1974-75	Percent of Enrolled 1975-76
Public:				
Jersey City State	2,946	3,044	30.7%	31.2%
Rutgers - New Brunswick	704	745	7.3	7.6
Montclair State	659	622	6.9	6.5
Rutgers - Newark	649	682	6.8	7.0
Wm. Paterson State	225	282	2.3	2.9
Essex County College	265	202	2.8	2.1
NJIT	237	256	2.5	2.6
Kean State College	208	254	2.2	2.6
Bergen County College	142	131	1.5	1.3
Glassboro State	79	85		
Ramapo State	76	77	2.8	2.9
Trenton State	79	71		
Stockton State	31	52		
Other County Colleges	112	106	1.2	1.1
Hudson County College Commission	0	216		2.2
Subtotal	6,412	6,825	66.9	68.5
Independent:				
St. Peter's College[a]	2,076	2,017	21.7	20.2
Fairleigh-Dickinson[b]	445	391	4.6	3.9
Seton Hall	257	279	2.7	2.8
Stevens Institute	168	176	1.2	1.8
Bloomfield	18	41		
Caldwell	35	37		
Felician	26	34	1.3	1.7
Rider	28	30		
Upsala	18	33		
Princeton	18	19	.2	.2
Other Independents	87	87	.9	.9
Subtotal	3,176	3,144	33.1	31.5
Total	9,588	9,969	100.0%	100.0%

[a] Hudson County residents comprise 57.0% of students in Jersey City State College and 74.0% of students in St. Peter's College.

[b] Figure for Fairleigh Dickinson includes enrollments at four campuses: Madison, Teaneck, Rutherford and the two year Edward Williams College.

SOURCES: NJ Department of Higher Education, "DHE Data Brief, #15," (Trenton, NJ, 1976); and idem, "DHE Data Brief, #10," (1976).

County College in nearby Newark. Over 65.0% of the county's college students are enrolled in institutions within the county or in Newark.[134]

The opening of the Hudson County College Commission in 1975-76 did not increase county student enrollments by a percentage larger than would be expected if the Commission had not opened. In fact, the total full-time enrollment in all New Jersey postsecondary institutions increased by 5.7% 1974 to 1975, while Hudson County full-time enrollments increased by only 4.0%. The proportion of students enrolled in public institutions did increase in 1975-76, (from 66.9% to 68.5%), and most of this increase was due to the opening of the Hudson County Commission.

Administrative Structure. A final reason why Hudson County would be a viable site for a voucher demonstration is that the administrative structure for a voucher "agency" already exists in the Commission. Since the Commission has been operating since 1973, high school students have had the opportunity to become acquainted with the services offered by the Commission; their familiarity with it should ease the transition to a voucher system. Also, the costs of establishing an administrative structure have already been expended, although additional personnel, including a project director and counselors, would be required to handle the demonstration.

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[134] The County Commission reported, after the year long pilot project, that the main reason why students used the local college centers was because they were close to their homes. They resisted placement in programs which were more than a 20 minute commute, but there are twelve postsecondary institutions in Hudson and Essex Counties.

The Demonstration Project

A voucher demonstration in Hudson County should involve two major components. The first would be the opportunity for any high school graduate to take a voucher, equivalent to full cost of tuition, to any New Jersey postsecondary institution in which the student is accepted. The second component would be the ability of the Hudson County College Commission to establish program guidelines for occupational and technological degrees most needed in the county, and to accept bids from postsecondary institutions in New Jersey and New York City to provide services under contract for these programs.[135]

Under these two components, the Commission would no longer be useful for simply placing students in liberal arts colleges at the cost of attendance at a two year college; the Commission's role would be expanded to a role similar to that of an educational voucher agency, and to a comprehensive college counseling center.

First Component

The purpose of making a voucher available to most Hudson County high school graduates (within a given year), is to provide each student with the financial opportunity to attend college, and to allow each student to choose a postsecondary institution on the basis of program offerings, perceived academic quality and other, non-cost variables.

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[135] The current programs in Electronics taught at Stevens Institute of Technology, and in Inhalation Therapy at the Jersey City Medical Center are examples of this operation.

The primary purposes of a demonstration project are to:

1) determine if there is an increase in college attendance rates if tuition and fee related financial barriers are removed, particularly among low and lower middle income students;
2) determine if there are substantial shifts in enrollments among the various postsecondary sectors, i.e., public university, state colleges, two year colleges and independent colleges, and
3) determine if a guaranteed tuition grant increases student persistence in college, particularly among low and lower income students.

There are, of course, several other measures which might be taken during a voucher demonstration project, but those listed above would provide basic answers to some of the more fundamental questions about vouchers.

Parameters. According to the 1970 U.S. Census, 51.9% of all New Jersey families had incomes below $10,000 a year. Nearly one-fourth (24.7%) had incomes between $10,000 and $15,000, and the remaining 23.4% had incomes over $15,000.[136] Due to unusually high economic inflation during the early 1970's, the median income of full-time employees in the United States had risen 40% by 1975.[137] On the basis of these figures, the following analysis will assume that about 75% of families in New Jersey earn less than $21,000 per year. ($21,000 represents an increase of 40% from $15,000). Students from families with incomes over $21,000 would not be eligible for a voucher in the demonstration project, since they have a greater ability to pay for college. The remaining students would be eligible to receive vouchers for the full amount of tuition and fees charged by the institutions in which they enrolled.

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[136] NJ Commission on Financing Postsecondary Education, "An Analysis of the Monetary Benefits and Costs of Higher Education in New Jersey in 1975-1976," (Princeton, NJ, 1976), Tables 2 and 3.

[137] According to the U.S. Census Bureau, median full-time salaries increased from $7,250 to $10,125 (40%) for men and women, between 1970 and 1975.

Students could take vouchers to any accredited postsecondary collegiate institution or proprietary school in New Jersey, to which they were admitted. The vouchers would be given by students to the institutions in lieu of tuition and fees payment, and the institutions would be reimbursed by the Hudson County (Voucher) Commission.

Based on the number of Hudson County high school graduates in 1976, which was 7,138, and on an expected stabilization in 1979 and 1980 due to birth rate phenomena, projections were calculated for 1978, 1979 and 1980. They are 7,500 (a 5% increase from 1976), 7,610 and 7,650 (an additional .5% increase each year), respectively. If 25% of these are excluded, representing those with family incomes greater than $21,000 per year, the number of Hudson County high school graduates eligible for vouchers during the proposed demonstration would be 5,625 (1978), 5,708 (1979) and 5,738 (1980), or a total of 17,071.[138]

The value of each voucher would be equal to the amount of tuition and fees charged by the student's postsecondary institution for the undergraduate students. Although it may appear to be desirable to limit that amount in order to avoid arbitrary increases in price, such limitations would violate the spirit of the demonstration; they might discourage some students from seeking admission to most preferred institutions because of cost of attendance.

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[138] It is believed that at least three high school graduating classes were chosen as a viable number of years in which to study the behavior of students as the effect of a voucher system.

Tuition at public institutions is currently mandated by the state, and tuitions among independent colleges are similar, except at Princeton University and Stevens Institute of Technology, where tuitions are much higher. These two institutions, however, currently enroll only 1.8% of Hudson County's student population, and, due to highly selective admissions standards, would probably enroll no more than 5% to 6% even under a full voucher system. The purpose of the voucher is, in fact, to provide students who prefer to attend these institutions the opportunity to enroll in them without regard to cost. For this reason, it is important that no arbitrary limitations are placed on the maximum value of a voucher.[139]

Costs. As discussed earlier in this report, it is not possible at this time to predict accurately how the number and distribution of enrollments will change under a voucher system. The analyses of expected costs of such a system is therefore limited, and must be based on different assumptions about numbers and distribution of enrollments.

The potential costs of a seven year voucher demonstration, in which three graduating classes are funded through two-year or four-year college careers, range from $31.3 million to $80.1 million, as shown in Table 16.

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[139] These institutions would not have an incentive to raise tuitions arbitrarily under a voucher system since only a few students would be using vouchers, and they could lose other students under higher prices. Since this is a demonstration project, full-cost tuition vouchers do not require prohibitive outlays of money.

TABLE 16

COSTS OF PROPOSED VOUCHER DEMONSTRATION UNDER SIX DIFFERENT ESTIMATES[a]

Costs
(in $000,000)

	I. 33.2% Participation		II. 50.0% Participation		III. 75.0% Participation	
	Current (N = 5,668)	Shift[b]	Current (N - 8,535)	Shift	Current (N - 12,804)	Shift
Year	A	B	C	D	E	F
1977-78	$64.2	$64.2	$64.2	$64.2	$64.2	$64.2
1978-79	2,752.1	3,097.2	4,080.9	4,597.6	6,062.0	6,838.3
1979-80	5,427.6	6,121.4	8,016.7	9,148.5	12,097.1	13,661.1
1980-81	8,015.4	9,152.8	12,000.7	13,712.5	17,932.8	20,503.8
1981-82	7,518.1	8,698.8	11,246.7	13,025.5	16,797.7	19,466.0
1982-83	4,984.8	5,845.8	7,429.7	8,728.0	11,069.1	13,013.3
1983-84	2,561.2	2,993.5	3,787.5	4,438.1	5,612.5	6,586.7
Total (7 years)	$31,323.4	$35,973.7	$46,626.4	$53,714.4	$69,635.4	$80,133.4

[a] The number of students eligible in each year is: 1978 - 5,625; 1979 - 5,708; 1980 - 5,738. If appropriate percentage is calculated from number eligible each year, total N may be determined. For example, in Plan I, 33.2% of 5,625 (1,868), 5,708 (1,895) and 5,738 (1,905), equals 5,668.

[b] The "shift" column represents enrollment distribution of students with family incomes of over $21,000; it is anticipated that students with lower incomes will tend to shift their enrollment patterns so that they more closely resemble high income students' enrollment distributions.

These figures were calculated for one year of planning a demonstration, which is estimated to cost $64,200, and six years of demonstration, at about $5.2 million to $13.4 million per year. These figures are, of course, rough estimates based on specified student response patterns. Columns A, C and E in Table 16 represent potential enrollments based on the current distribution of the eligible student income group across institutional sectors. Columns B, D and F represent a shift in distribution which might occur if students enrolled in the same way that higher income students enroll across institutional sectors.[140]

It is likely that total costs for a demonstration would run toward the lowest estimates. The primary reason for this is that, even with financial assistance, students have only moderate persistence rates in college. It was noted earlier that only 75% of public university students, and 60% to 65% of state college and independent college students complete four years of college. Among two year students, only 50% tend to enter the second year. If persistence rates increase under a voucher system, it is probably safe to estimate that at most, only 80% will complete college programs. This would reduce the costs outlined in Table 16.

Since the demonstration proposal as outlined purports to include all income eligible students in Hudson County, at current and predicted cost levels, it is reasonable to assume that these costs approximate actual costs for one county under a statewide voucher system (at less than full-cost tuition levels). Ordinarily, social experimentation is conducted with much smaller sample sizes and with a substantially lower price tag.

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[140] For a detailed discussion of calculations leading to figures in Table 16, including tuition and fee levels, salaries, enrollment distributions and average per student voucher awards, see Appendix I.

A method through which costs for a demonstration could be deliberately reduced, for example, would be to select a random sample of the eligible student population. The sample could be equal to 25% of the eligible population, and still consist of at least 1,400 students. In this way, total demonstration costs could be reduced to 25% to 30% of those outlined in Table 16. For example, 30% of the costs estimated for six years of the voucher demonstration for Plan I, not including the planning year, would be $9.4 million under current distribution and $24.0 million under a shift in distribution. This would amount to $1.6 million a year and $4.0 million a year, respectively.

Another sample might be a selection from among Hudson County's 20 public and 18 non-public high schools. This sample might be more appropriate because all of the students in a specified school's graduating class would be involved in the voucher program. Fewer external variable, such as being the only member of a group of friends to be offered a voucher, would interfere with student response patterns.

It must finally be noted that the costs ranges shown in Table 16 are only estimates, which are based on predictions about inflation, high school graduations, and student response patterns. The cost of a demonstration project for a specified number of students will have to be carefully assessed in terms of the most recent data available; this is the purpose of the planning year.

Planning. The one year devoted to planning would be used to educate high school students about the voucher program, to make preliminary assessments of student responses to the vouchers, and to counsel interested students in selection of postsecondary institutions.

This year of planning is vital to the successful implementation of the voucher demonstration. In fact, it is a primary component of the plan which could suffice in itself to lend substantial insight into the feasibility and implications of a voucher system. A carefully planned year of contacting students, eliciting student responses to the opportunity of receiving a voucher and assessing the degree of that response in future years could contribute to an understanding of the effects of vouchers. Since the cost of a planning year has been estimated at $65,000, it is possible that a private foundation or the National Institution of Education would be interested in providing planning funds.

Evaluation. The project's research staff would be expected to establish an evaluation format and data collection system during the planning year. They would keep accurate and up-to-date information files about each eligible student's past high school activities, whether or not they utilized vouchers. A control group of students could consist of high school graduates (of the designated years) in another county which is most similar to Hudson. An outside evaluation team sponsored by the State or Federal government might provide a summative evaluation of the demonstration.

Sources of funding. Cost estimates are based on a full voucher system for Hudson County students; it should be noted that, if the entire New Jersey postsecondary system was funded with student vouchers, these cost estimates would fall into a normal expenditure level for higher education in Hudson County.

Nevertheless, with costs as delineated in Table 16, a demonstration project of such proportions would probably not be funded. A significantly reduced student sample might decrease costs to a point that state and county monies which would normally be spent on Hudson County postsecondary students could be channeled into the project.

Second Component

The Hudson County (Voucher) Commission might be able to enroll more students from the county if it offered a wider range of two year career programs. The College Commission has currently negotiated for special programs in Electronics and Inhalation Therapy in contracting postsecondary institutions. The Commission should be able to establish guidelines for two year business and accounting degrees, science technicians, nurses' aide and early childhood teacher aide programs.[141] Collegiate and proprietary postsecondary institutions and the vocational/technical schools in Hudson County, New York City and Newark would be invited to bid for contracts under which they would provide necessary related program services.[142] The County Commission would be free to contract with the bidder whose services appear to be most comprehensive and offered at a reasonable cost.[143]

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[141] These occupations are predominant, along with several professional occupations, among projected manpower needs in Hudson County up to 1980. See NJ Department of Labor and Industry, "New Jersey's Manpower Challenge of the Eighties," (Trenton, NJ, 1975).

The provision of such contracted services might curtail the number of students who go to other counties for two year programs, and could therefore reduce total costs through a reduction in tuition "chargebacks."

The establishment of additional occupational programs could encourage increased enrollments of students who might otherwise not enroll in college by providing greater diversity in postsecondary alternatives. This would not only enhance the voucher demonstration, but would strengthen and solidify the role of the College Commission in the County.

Demonstration Alternative #2: Special Student Services

Career Counseling

At a recent public meeting in New Jersey,[144] the Vice Chairman of the Board of Directors for the Educational Opportunity Fund[145] stated that low income students require more effective recruitment and counseling than they are currently receiving. He felt that high school students do not obtain adequate counseling services from guidance personnel, particularly in urban areas, where disadvantaged students are more often discouraged from enrolling in college than provided incentives to do so. The Vice Chairman stated that "contractual agencies for counseling" were probably preferable for such students, because the state could more closely monitor the orientation and quality of counseling services.

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[142] Students would have no trouble commuting for special programs. A public transit system, PATH, operates modern trains from New York City, through Jersey City to Newark; the fare is 30 cents for one direction and the ride is no longer than 25 minutes out of Jersey City to Newark or to New York City.

[143] Students who enrolled in these programs would be matriculated as County Commission students and would receive Associates degrees from the Commission. They could, of course, use their vouchers for tuition payments.

[144] Public hearing for final report of New Jersey Commission on Financing Postsecondary Education, Newark, New Jersey, February 16, 1977.

[145] The Educational Opportunity Fund was established by the New Jersey Board of Higher Education in 1968. It was given the mandate to aid lower income students (less than $10,000) with potential ability who previously might not have attended college. Both financial aid and academic support are provided by the Fund.

The New Jersey Commission on Financing Postsecondary Education found that, despite the apparent availability of information about postsecondary institutions and programs, the information is not being supplied to students consistently or comprehensively. "Student information needs focus on 1) the decision to either attend a postsecondary institution or to enter the work force; 2) selection of a particular postsecondary institution or program; 3) costs of completing a program and 4) eligibility for and types of financial aid."[146] These decisions are best made in light of appropriate information about all postsecondary alternatives and the outcomes of pursuing these alternatives, and about student preferences and abilities.

All high school seniors should be given the opportunity to pursue college and career alternatives, to complete occupational inventories and to receive counseling from informed personnel. Students should understand the range and purposes of postsecondary options before making a decision about college attendance.

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[146] NJ Commission on Financing Postsecondary Education. Financing in an Era of Uncertainty, Final Report. (Princeton, New Jersey, 1976), p. 71.

One way to achieve this goal is to provide vouchers to high school seniors for counseling and information services. Under a voucher plan, each high school senior would be given a voucher to be used for counseling, information and testing services at an agency organized specifically to provide these services. The Laboratory of Psychological Studies at Steven's Institute of Technology in Hoboken, for example, provides general aptitude, interests and skills assessment testing, and vocational/psychological counseling.[147] Agencies which provide these services, in addition to providing objective program information about postsecondary institutions in the state, could contract with the state to serve voucher students. The primary purpose of this program would be to determine:

1) what types of choices students make if they are (apparently) better informed about postsecondary options;
2) if student persistence rates increase because they make more informed decisions, based on own aptitudes and ambitions and on program options available to them;
3) if student demand for certain types of programs affects the offerings of postsecondary institutions and
4) how many students would take advantage of a "free" service which is designed to assist them in making more relevant, responsible choices.

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[147] The Laboratory charges $125 for services to high school and college students, with supplementary charges up to $115 for individual testing, written reports and reports of test scores and profiles.

Costs. The value of the vouchers would vary with the types of services provided to each student, but the limit would be about $150 per student. It is probable that most students would opt to receive some comprehensive set of services, which could be priced at similar rates throughout the state. This, of course, would not prevent the agencies from setting competitive prices.

There were 113,771 New Jersey high school graduates in 1976;[148] if all of these students utilized the special services vouchers, the total cost to the state would be around $17.0 million. Since the number of high school graduates is expected to increase (by less than 2.0%) until 1982, then decrease for at least a decade after that, the costs of a special services voucher would not increase substantially, but would still be considered prohibitive.

However, the benefits of such services may prove to outweigh these costs; for this reason, a demonstration in which a limited sample of high school seniors participates, could be worthwhile. One way of limiting the sample would be to randomly select 5.0% of the graduating class and offer them a special services voucher. A sample of over 5,000 students could then be observed, but at a much lower cost (about $750,000). An alternative is to select certain urban New Jersey cities, such as Newark, Camden, Trenton or Jersey City. This would limit the student sample size and provide more detailed information about the response patterns of urban disadvantaged students. A sample of 10,000 of these students would cost about $1.5 million.

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[148] New Jersey Department of Labor and Industry statistics.

Remediation

Another major function which contracted agencies could perform is the assessment of academic skills proficiency. Many students are graduating from high school with a lack of reading, math and writing skills. Rough estimates derived from institutions' reported student SAT scores and information from institutional representatives who work in remedial/developmental programs, indicate that nearly one half of first year county college students and one third of state college and university students lack proficiency in some academic skills.

The New Jersey Department of Higher Education distributed a "Basic Skills Survey" in the spring, 1975 to all postsecondary institutions in the state.[149] Responses to the survey indicated that the level of skills deficiencies among students is unknown at many institutions. The institutions did not provide comprehensive test results; of those test scores which were reported, over 60% fell below the national norms for the relevant tests.

A large number of these students are not given the opportunity to participate in remedial or developmental studies programs in their institutions. This may account in part for the low persistence rates in the state's public postsecondary institutions. In light of this increasingly more serious problem, it is reasonable for the state to provide increased opportunity for students who do not possess adequate skills for college level work, to participate in remedial/developmental studies programs in their postsecondary institutions. The state could provide such opportunity by giving vouchers to these students for special remedial programs.

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[149] New Jersey Department of Higher Education. "A Survey of Basic Skills Assessment and Remedial Programs in New Jersey Colleges." Research Note. Trenton, New Jersey. October, 1976.

The test scores of these students would be submitted by the counseling agency to the state,[150] which would notify the appropriate students of the opportunity to use a voucher to obtain remedial services. The vouchers could either be valued at full cost of instruction for remedial programs offered by the institutions, or they could be used to pay for supplementary services required in remedial programs.

The implication of a voucher system for payment of remedial and developmental services focuses on student choice and opportunity: high school graduates who may not have applied to college, or who believed they might be financially or academically ineligible to attend a preferred postsecondary institution, would have greater latitude in choosing to attend college.

There is no accurate method with which to predict how many students would be eligible for remedial services vouchers. If the rough estimates cited earlier are an indication of the extent of the problem, then it is likely that by the 1978-79 school year (when such a program might be commenced), up to 30,000 first time college students would require some remedial or developmental work. This would represent about 35% of enrolled first year students in New Jersey's postsecondary collegiate institution. This number could, of course, be greater if students who would not have gone to college, enroll under the voucher program.

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[150] The Department of Higher Education should cooperate with postsecondary institutions to determine which tests would be accepted as the most valid indicators of skills proficiency.

Costs. A voucher which covers the full per student costs of such specialized programs might be valued at $1,800.[151] At this cost level, an expenditure of $60.0 million would be required to cover vouchers for 30,000 students. A voucher program which covers supplementary remedial services only, and which might be valued at $250 per student,[152] would cost about $7.5 million for 30,000 students.

A more financially viable demonstration of vouchers for remedial services could be linked to the special services voucher program. For example, 10,000 urban students in a few designated demonstration cities might each use a special services voucher, and 5,000 might find they are eligible for a remedial voucher. The combined cost of these two programs for this sample would be $2.8 million at $150 per student for 10,000 students, and $250 per student for 5,000 students. The combined cost would be $10.5 million for the same numbers of students, if a full cost remedial voucher is available.

Conclusion

It is important that any demonstration of vouchers be closely monitored and evaluated so that the effects of voucher on student and institutional behavior may be assessed. The U.S. Office of Education has recently expressed interest in sponsoring the evaluation of a voucher demonstration on the postsecondary level. That office has supported other postsecondary voucher activities; its staff believes that vouchers may be a viable form of financing postsecondary systems because certain problems encountered by elementary school systems (i.e., desegregation, forms of financing, compulsory education) do not affect postsecondary education.

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[151] The $1,800 figure is an estimate based on approximate costs of liberal arts programs per student in county colleges ($1,840) and in state colleges ($1,700). (See New Jersey Commission on Financing Postsecondary Education, Final Report, p. 4, Appendix II.)

[152] The $250 figure is based on estimates of county college representatives who currently work in remedial programs. These services include monitoring, counseling and testing of remedial students.

It may be that the availability of vouchers does not ultimately affect student college going behavior. This would be unfortunate, because vouchers are designed to increase access opportunity, equity and diversity of options for students beyond the level to which these goals have currently been attained.

People do not know, and can only continue to guess, what vouchers will do for postsecondary education; vouchers should be implemented, at least in a demonstration project, for the sake of observation and analysis. They can be an attractive alternative to current funding policies. As it has been a forerunner in adopting student aid programs in the past, New Jersey's postsecondary community could view favorably the need for voucher demonstrations, and respond to it.[153]

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[153] At this writing a voucher bill (A-3065) has been introduced in the New Jersey State Assembly, to provide New Jersey voters with the opportunity to vote for an elementary and secondary voucher system. The bill would provide each parent with a voucher equal to the per student state expenditure for education. These vouchers could be used at any school of the parents' choice. The bill was introduced by an Assemblyman from Newark, one of New Jersey's most depressed urban cities.

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Appendix A

Development of Hudson County Voucher Demonstration Cost Estimates

A few basic assumptions ensue throughout this analysis: the first is that tuition and fees will probably rise approximately 5.0% over each two year period. The tuition and fee levels for the years selected for a voucher demonstration are based on current 1976-77 tuition and fees. They are listed in Table I.

TABLE I

ESTIMATED TUITION AND FEES DURING VOUCHER DEMONSTRATION[a]

Institution	1976-77	1978-80	1980-82	1982-84
Rutgers/NJIT	$905	$950	$998	$1,048
Jersey City State College[b]	874	918	964	1,012
Other State Colleges	850	892	936	983
Hudson County College	480	500	525	550
Other County Colleges[c]	1,030	1,080	1,134	1,190
St. Peter's College[b]	2,248	2,360	2,478	2,602
Other Independent Colleges[d]	2,768	2,906	3,051	3,204
Proprietary Institutions	2,095	2,200	2,310	2,425

[a] Average tuition was calculated for each sector.

[b] Jersey City State College and St. Peter's College currently enroll over 50% of Hudson County students. Since their tuition and fees are substantially different from other state colleges or independent colleges, they have been designated separately, and are given appropriate weights in the calculation of expected costs.

[c] Other counties have a "chargeback" policy for out-of-county residents; the chargeback is paid by the student's county.

[d] The higher costs at Princeton University and Steven's Institute of Technology have been averaged in according to the percentage of students attending each.

A second assumption is that all salaries are increased by about 6.0% each year, and that fringe benefits are 19.0% of salaries. Personnel required for a demonstration project include a Project Director, a Research Associate and an Administrative Assistant for the first and planning year. Salaries for these positions are set at $48,800. Once the vouchers are distributed and students are participating in the project, it is estimated that an additional Research Associate will be required, and that two additional counselors would be added to the counseling staff already functioning in the Hudson County College Commission.[1] Salaries for these three positions would be $45,000. A schedule of salaries and operating expenses is shown in Table II.

The expected distribution of students is based on their current distribution in public and independent institutions. About 45% of each Hudson County high school class enrolls in a postsecondary institution, and it is estimated that an additional 5% enroll in a proprietary institution. Of these, about 50% have incomes over $21,000. The distribution of students in these two income groups is shown in Table III.

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[1] The current (acting) President of the Commission, Dr. Joseph Flynn, has provided personnel estimates based on his current staff. Dr. Flynn believes a shift in emphasis would not require the hiring of several new personnel.

TABLE II

ESTIMATED NON-VOUCHER EXPENDITURES FOR DEMONSTRATION

		Expenditures			
Year	Salaries[a]	Fringe Benefits[b]	General Expenses[c]		
			I	II	III
1977-78	$48,800	$9,272	$6,125	$6,125	$6,125
1978-79	96,728	18,378	6,511	6,526	6,526
1979-80	102,532	19,481	6,906	6,959	7,103
1980-81	108,684	20,650	7,126	7,175	7,186
1981-82	115,205	21,889	7,550	7,599	7,610
1982-83	122,117	23,202	7,080	7,118	7,120
1983-84	110,509	20,997	7,485	7,501	7,508

[a] Salaries are increased by 5.0% per year. In 1977-78, there are three expected personnel, in 1978-83, six expected personnel and five in 1983-84.

[b] Fringe benefits are 19% of salaries.

[c] Base for general expenses includes: phone ($4,800); postage ($780) and base office supplies ($350). Differences in expenses under three plans reflect additional supplies needed for increasing numbers of students. All expenses are increased by 6.0% per year.

TABLE III

PROPORTIONS OF STUDENTS IN POSTSECONDARY SECTORS, BY INCOME

Sector	Less than $21,000	Greater than $20,999
Rutgers University	50%	50%
State Colleges	55	45
County Colleges	60	40
Independent Colleges	40	60
Proprietary Institutions	50	50

SOURCE: New Jersey Commission on Financing Postsecondary Education, "An Analysis of the Monetary Benefits and Costs of Higher Education in New Jersey, 1975-76," (Princeton, New Jersey, 1976), Table 2.

If the proportion of students in each sector with incomes below $21,000 are calculated from current enrollment distributions, as shown in Table III, two types of distributions may be used for an analysis of voucher costs. The first distribution is that of voucher eligible students across sectors as they currently distribute themselves. The second distribution represents a shift of voucher eligible students to a distribution across sectors as students with family incomes greater than $21,000 currently distribute themselves. Students who have a greater ability to pay for college tend to enroll in higher cost institutions, and it is not unreasonable to expect students with vouchers to follow a similar pattern of enrollments. The percentages of students across sectors for each of these distributions are shown in Table IV.

A final consideration for a cost estimate is how many students will enroll in college under a voucher system. Currently, about one-third of Hudson County students who would be eligible for a voucher enroll in college.[2] This current percentage, as well as increases to 50% and 75% of eligible students, are included in cost estimates.

There are then, six cost estimates based on two distributions of students under three different enrollment estimates. For each anticipated percentage of enrollees, (33.3%, 50% and 75%), an estimate based on current distribution of that income group and an estimate based on a shift in enrollment to higher cost institutions are calculated. Each estimate is determined over a seven year period, during which one year of planning is included and six years for each of three classes to complete up to four years of college. These estimated student enrollments are outlined in Tables V and VI.

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[2] This figure is based on two facts: 1) 50% of those who enroll in college, who represent 25% of all high school graduates, are in the eligible income category and 2) 75% of graduates are in this category. Thus, 25% of 75% equals 33.2%.

Based on these enrollments and calculated tuition and fee levels, the average per student voucher would vary, as shown in Table VII. The average voucher value is based on tuition and fee costs only; it does not include salaries and operating expenses. The average per student voucher was calculated by dividing total students into total voucher awards for any given year. Total voucher awards were calculated by multiplying the number of students in each sector by estimated tuition and fees for these sectors. The average award was calculated as a measure of convenience.

The figures shown in Table 16, Chapter V, are based on Tables I through VII. For each year, the appropriate salary level, fringe benefits and operating expenses were added to the total voucher costs (Estimated enrollments multiplied by estimated tuition and fees for each year). The total cost estimate for each plan is the sum of these related costs over seven years.

TABLE IV

CURRENT DISTRIBUTION OF STUDENTS IN POSTSECONDARY SECTORS FOR TWO INCOME LEVELS

Sector	Less than $21,000	Greater than $20,999
Rutgers/NJIT	15.5%	15.4%
State Colleges	45.4	36.8
County Colleges	7.3	4.8
Independent Colleges	23.2	34.4
Proprietary Institutions	8.6	8.6
Total	100.0%	100.0%

TABLE V

ESTIMATED YEARLY ENROLLMENTS UNDER PLAN I (CURRENT DISTRIBUTION)

Year	33.2% Participation		50.0% Participation		75.0% Participation	
	Lower Division	Upper Division	Lower Division	Upper Division	Lower Division	Upper Division
1978-79	1,868	--	2,812	--	4,219	--
1979-80	3,763	--	5,666	--	8,500	--
1980-81	3,800	1,571	5,723	2,365	8,585	3,547
1981-82	1,905	3,165	2,869	4,765	4,304	7,141
1982-83	--	3,196	--	4,813	--	7,220
1983-84	--	1,602	--	2,413	--	3,620

TABLE VI

ESTIMATED YEARLY ENROLLMENTS UNDER PLAN II (SHIFTED DISTRIBUTION)

Year	33.2% Participation		50.0% Participation		75.0% Participation	
	Lower Division	Upper Division	Lower Division	Upper Division	Lower Division	Upper Division
1978-79	1,868	--	2,812	--	4,219	--
1979-80	3,763	--	5,666	--	8,500	--
1980-81	3,800	1,618	5,723	2,435	8,585	3,654
1981-82	1,905	3,259	2,869	4,907	4,304	7,361
1982-83	--	3,291	--	4,957	--	7,434
1983-84	--	1,650	--	2,485	--	3,727

TABLE VII

ESTIMATED PER STUDENT VOUCHER COSTS FOR TWO DISTRIBUTIONS

Year	Per Student Costs			
	I		II	
	Lower Division	Upper Division	Lower Division	Upper Division
1978-79	1,408	--	1,592	--
1979-80	1,408	--	1,592	--
1980-81	1,478	1,440	1,671	1,648
1981-82	1,478	1,440	1,671	1,648
1982-83	--	1,512	--	1,730
1983-84	--	1,512	--	1,730